LEGAL UNCERTAINTY, ECONOMIC EFFICIENCY, AND THE PRELIMINARY INJUNCTION DOCTRINE

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INTRODUCTION

In this Article, we consider preliminary injunctions from a radically different perspective than that articulated in judicial opinions and prior legal scholarship. By conventional accounts, when confronted with uncertain legal entitlements, courts should consider preliminary awards only if adequate compensatory remedies are unavailable. The trouble with this "compensatory" view is that it is unresponsive to the ex ante behavioral consequences of legal uncertainty. When rights are uncertain, parties appreciate the full benefits of their conduct, but they discount harm to others of this conduct by the likelihood that they possess a legal entitlement to so act. Hence, individual incentives to behave efficiently are distorted by uncertain legal entitlements. Preliminary injunctions correct this distortion by wielding a stick and providing a carrot for a defendant who would otherwise discount damages given some positive probability that she may not have to pay them. The powerful stick in this example is the interrorem damages that defendant will be required to pay if an injunction is granted and she violates it. The carrot is the reimbursement of compliance costs if defendant prevails at the end of the litigation. These penalties and rewards come into play only if the plaintiff decides to pursue the injunction, which is to say that the preliminary injunction doctrine takes the conduct decision out of the hands of the biased defendant and places it in the hands of plaintiff who, by design, faces the proper marginal costs and benefits of the decision. Interestingly, although courts do not claim that they are promoting efficient behavior when granting preliminary injunctions, that characterization represents a good account for much of what courts are doing.

Preliminary injunctions are broadly used. Parties seek injunctions to enjoin patent, copyright, and trademark infringement,\(^1\) corporate mergers,\(^2\) breaches of contract,\(^3\) and antitrust violations.\(^4\) The injunction doctrine, however, is not limited to these domains. For example, the injunction is a key weapon in the defense of the death penalty, where, in a number of states, the judiciary has enjoined the state from executing inmates whose claims of innocence are pending.\(^5\) Moreover, the injunction is often used to solve foreign policy disputes. In the 1950s, the U.S. Supreme Court enjoined the U.S. State Department from renewing the visas of three dissidents who had fled the Soviet Union because of their opposition to communism.\(^6\) Judicial review is not limited to the idiosyncrasies of the American legal system; the ability to obtain an injunction extends to the international arena as well, where the United Nations has used the power of the international courts to issue preliminary injunctions in a dispute between two states.\(^7\)

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of contract, nuisances, marriages, entertainment, and even manner of dress. In fact, almost any activity one can imagine is potentially subject to legal restraint through preliminary proceedings. However, remarkably little attention has been paid to whether these proceedings tend to promote or discourage desirable activities. The neglect of this issue among law and economics scholars is particularly difficult to explain. The doctrine specifying when a court will grant a preliminary injunction is cast in terms with obvious economic content. The preliminary injunction is only to be granted if plaintiff will suffer significant harm and stands to recover inadequate damages if she prevails at the conclusion of the case. Moreover, the right to a preliminary injunction depends in large part (under all versions of the controlling rule) on


7. See, e.g., Newsom v. Albemarle County Sch. Bd., 354 F.3d 249 (4th Cir. 2003) (using injunction to prevent the enforcement of a high school dress code); Luckette v. Lewis, 883 F. Supp. 471 (D. Ariz. 1995) (seeking preliminary injunction against a prison policy that prohibited the plaintiff from wearing colors thought to be associated with particular gangs).

8. Preliminary injunctions have recently been sought in other areas, including preventing executions. In Germany v. United States, 526 U.S. 111 (1999), Germany sought a preliminary injunction to prevent the scheduled execution of one of its citizens in Arizona. See also Ozmint v. Hill, 541 U.S. 929 (2004) (granting application to vacate preliminary injunction of execution). Preliminary injunctions have also been used to prevent religious celebrations, Chabad of S. Ohio v. City of Cincinnati, 363 F.3d 427 (6th Cir. 2004), and to challenge courthouse and classroom postings of the Ten Commandments. ACLU of Ky. v. McCrery County, 354 F.3d 438 (6th Cir. 2003), aff’d, 125 S. Ct. 2722 (2005).

9. There have been some efficiency considerations of preliminary injunctions in the context of intellectual property cases, but these works have not explored the efficiency of the standard per se. See, e.g., Jean O. Lanjouw & Josh Lerner, Tilting the Table? The Use of Preliminary Injunctions, 44 J.L. & Econ. 573 (2001); Mark A. Lemley & Eugene Volokh, Freedom of Speech and Injunctions in Intellectual Property Cases, 48 DUKE L.J. 147 (1998).
the probability that plaintiff will prevail if the case is litigated to a conclusion. These requirements seem, unmistakably, to represent an attempt to adapt efficiently to the uncertainty of the final outcome. In commonsense terms, there is a prevailing awareness that the requisite tasks to achieve the objectives of the controlling legal rule cannot be deferred until the conclusion of the litigation.

Preliminary injunction doctrine recognizes that the task of protecting legal entitlements cannot be postponed until the conclusion of the litigation concerning the assignment of those entitlements. This fact is at odds with the usual law and economics understanding that the assignment and protection of entitlements can be separated and handled sequentially so long as damages at the conclusion of the case are adequate. Accordingly, proponents of the current preliminary injunction doctrine cite the oft-mentioned claim that adequate damages at the conclusion of the case make the entitlement holder whole while encouraging efficient allocation of resources. The most prominent expression of this claim is the so-called "efficient breach hypothesis." This

10. Building on Guido Calabresi and A. Douglas Melamed’s framework for analyzing how legal entitlements are assigned and protected, scholars often look at entitlement protection in isolation from the assignment of rights. Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 HARV. L. REV. 1089 (1972). Theories of efficient liability rules begin with certainty over some initial entitlement: The court has already determined to whom the entitlement belongs (or the parties know how the court will rule). The parties also know the remedies. Armed with this information, efficient tradeoffs can be made. Unfortunately, parties frequently do not know to whom the court will grant an entitlement. Preliminary injunctive actions make this indeterminacy quite apparent; yet, the indeterminacy is present in numerous other contexts.

11. The efficient breach hypothesis has its origins in seventeenth-century British common law. See Bromage v. Genning, (1616) 81 Eng. Rep. 540 (K.B.). Oliver Wendell Holmes cites Lord Coke in Bromage for support of the fundamental premise of the efficient breach hypothesis: "The duty to keep a contract at common law means...you must pay damages if you do not keep it,—and nothing else." Oliver Wendell Holmes, The Path of the Law, 10 HARV. L. REV. 457, 462 (1897). Departing from this premise, the Holmesian "bad man"—knowing the costs and the benefits of contract completion—is in a good position to determine the efficient remedy. It appears that the term "efficient breach" may have been coined, at least in print, by Charles J. Goetz and Robert E. Scott. See Charles J. Goetz & Robert E. Scott, Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach, 77 COLUM. L. REV. 554 (1977). Earlier formal treatments of the efficient breach hypothesis were offered by Robert Birmingham, John Barton, and Richard Posner. See RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW § 3.8 (1972); John H. Barton, The Economic Basis of Damages for Breach of Contract, 1 J. LEGAL STUD. 277 (1972); Robert L. Birmingham, Breach of Contract, Damage Measures, and Economic Efficiency, 24 RUTGERS L. REV. 273 (1970); Robert L. Birmingham, Damage Measures and Economic Rationality: The Geometry of Contract Law, 1969 DUKE L.J. 49. Calabresi and Melamed generalized the insight beyond contracts using liability rules, and this work was expanded and further formalized by Louis Kaplow and Steven Shavell. See Calabresi & Melamed, supra note 10; Louis Kaplow & Steven Shavell, Property Rules Versus Liability Rules: An Economic Analysis, 109 HARV. L. REV. 713, 725 (1996) (arguing that liability rules (with appropriate court-determined damages) allow infringers, who know whether their own valuations exceed the court's damages, to make an allocationally efficient choice from their more informed perspective).
hypothesis maintains that court-ordered expectation damages (a liability rule) lead parties to maintain or abandon prior agreements efficiently. Although this argument was initially focused on contracts, similar efficiency-based arguments have also been made to promote the use of liability rules within the context of tort, property, corporate, and constitutional law.\footnote{See Ashutosh Bhagwat, \textit{Hard Cases and the (D)Evolution of Constitutional Doctrine}, 30 \textit{Conn. L. Rev.} 961, 1008 (1998) (arguing that liability rules can protect constitutional rights more effectively than property rules in some cases); Calabresi & Melamed, \textit{supra} note 10; Kaplow & Shavell, \textit{supra} note 11; Eugene Konotorovich, \textit{Liability Rules for Constitutional Rights: The Case of Mass Detentions}, 56 \textit{Stan. L. Rev.} 755 (2004). But cf. Akhil Reed Amar, \textit{The Constitution and Criminal Procedure: First Principles} 115 (1997); Jules L. Coleman & Jody Kraus, \textit{Rethinking the Theory of Legal Rights}, 95 \textit{Yale L.J.} 1335, 1339-40 (1996).}

The basic idea is that if a party is required to compensate anyone harmed by particular conduct, the party, in deciding whether, and with what frequency, to engage in the conduct, will internalize the costs imposed on others and engage in the conduct only to the point at which the benefits of doing so exceed the aggregate costs. Liability rules encourage parties to weigh the costs of avoiding liability—through performance (e.g., completing a contract) or nonperformance (e.g., not causing a nuisance or otherwise interfering with another’s entitlement)—against the costs of facing liability (e.g., breaching the contract and paying the damage remedy or causing a nuisance and paying compensation). Thus, when properly employed, the liability rule remedy, we are constantly reminded, maximizes social welfare. The starting point of our analysis is that such efficiency claims often are wrong.

When the assignment of entitlements (and, hence, liability for interference with entitlements) is uncertain, parties rationally discount harms when selecting their course of conduct. Uncertainty biases the estimates that are required under the efficient breach and other efficient “takings” hypotheses. This kind of uncertainty is virtually always present in preliminary proceedings. Yet leading commentators see “no occasion to grant immediate protection” when a “final judgment can remedy the plaintiff’s injuries.”\footnote{13. John Leubsdorf, \textit{The Standard for Preliminary Injunctions}, 91 \textit{Harv. L. Rev.} 525, 541 (1978). Even efficiency-minded judges have echoed this view. \textit{See} Am. Hosp. Supply Corp. v. Hosp. Prods., 780 F.2d 589, 594 (7th Cir. 1986).}

We show, however, that the availability of an adequate final remedy is not a sufficient justification for denying preliminary injunctions: adequate compensation at the conclusion of the case does not provide parties with sufficient incentive to engage in efficient conduct before and during the case.\footnote{14. Commentators have emphasized the incommensurability of damages for certain temporary losses of entitlements: “The right to speak or vote or worship after trial does not replace the right to speak or vote or worship pending trial, and damages for temporary loss...} This point has been obscured by the static...
treatment of preliminary injunctions in the existing academic literature. However, it is clear that the preliminary injunctive proceeding is a dynamic process—a process that compels consideration of ex ante motivations and strategic behaviors. Viewed from this light, preliminary injunction doctrine can clearly be seen as an adaptive response to the impairment of parties' incentives resulting from the uncertainty of entitlement assignments.

For concreteness, consider the following hypothetical involving a contract for the provision of a well-specified good by a seller to a buyer who has paid a fixed amount up front. If we set the seller's cost to 70 and the buyer's value to 100, performance of the contract would increase social welfare by placing the good in the hands of the higher-valuing party (the buyer, in this case). The possibility of expectation damages makes it in the personal interest of the seller to do what is socially desirable. If she does not perform, the seller saves 70 in terms of performance costs but must pay 100 in the form of expectation damages to the buyer. The remedy thus aligns the seller's incentives with that which is socially desirable. However, this simple implication does not hold when liability is uncertain—a state of the world which, we again emphasize, is reasonably presumed in the context of preliminary injunction hearings.

Uncertainty over entitlements changes the efficient breach calculation. For example, imagine that the seller believes there is a 50% chance that her obligation to perform, under the prevailing circumstances, will be legally excused. Under these circumstances, she will not perform (though performance results in the most efficient result), even when expectation damages are perfectly estimated and fully compensatory. When deciding whether to perform, the seller still compares the expected cost of performance (70) to the expected damages for breaching. In this case, however, her expected damages are now 50, reflecting the expectation damages (100) discounted by the likelihood that the seller will not be held liable for breach (50%). So the rational, risk-neutral seller will not perform even though she may be required to make the buyer whole ex post. This is not an efficient result. Liability rules generally (and expectation damages specifically) do not preserve parties' rights are not even approximate compensation.” DOUGLAS LAYCOCK, THE DEATH OF THE IRREPARABLE INJURY RULE 122 (1991). While this point has merit, it is not the one we advance here. Our claim is that even when damages provide approximate and adequate compensation for individual harm, avoidable efficiency losses still accrue.

16. Strategic use of preliminary injunctions by plaintiffs is not uncommon. Parties often pursue preliminary actions, knowing that they are likely to get the same judge at the final stage (especially in state courts) and that judge is unlikely to switch her views of the merits subsequently. This may improve a party's bargaining power in settlement negotiations or may offer some other strategic advantage over competitors. See id.
17. The upfront payment simplifies our example by allowing us to focus exclusively on the seller's breach decision.
18. The expected cost of breaching is now a 50% chance of owing 100 and a 50% chance of owing 0 (i.e., (100 x 50%) + (0 x 50%) = 50).
incentives to behave efficiently in the context of legal uncertainty—the quintessential context of preliminary hearings.

The preliminary injunction restores efficiency to liability rules by taking the breach decision out of the hands of the compromised seller. At the point where the seller announces that she is going to breach, the buyer (if she does nothing) expects a 50% chance of receiving 100 and nothing otherwise, leaving her with an expected value of 50. If, however, the buyer seeks a preliminary injunction, she will receive a value of 100 through performance, which represents a net expected increase in value of 50 (i.e., 50% × 100) at an expected cost of only 35 (i.e., 50% × 70, representing the 50% chance that she will have to reimburse the seller’s compliance cost if her injunction was granted improperly). As a general matter, it is easy to show that the buyer will compel performance through a preliminary injunction if, and only if, performance is efficient. Thus in the presence of legal uncertainty, a key (but largely unappreciated) function of preliminary injunctions is to promote efficiency.

Of course, indeterminacy of entitlement is not limited to cases involving preliminary injunctions; it is not uncommon for parties to be unsure of their future liabilities at the stage at which the efficient breach (or taking) hypothesis requires them to calculate the expected costs and benefits of their planned conduct. In these situations, in which the rights to be determined by the proceedings are uncertain, the promised efficiency of liability rules cannot be assured. Therefore, the implications of our analysis reach beyond preliminary injunctions. As a point of departure into our analysis, we now briefly consider the various legal rules which are, or might be, used in deciding whether to grant a preliminary injunction.

19. Often, with liability rules, defendant-infringer is well positioned to weigh the costs and benefits of her conduct. But uncertainty over entitlements biases her view of the benefits because she is liable for compensating unrealized benefits in only some cases when she infringes, while she faces the costs in all cases when she does not infringe. Preliminary injunctions respond to infringers’ discounting of damages by providing compensation to defendants who are compelled to engage in conduct that is later determined not to be legally required.

20. It is also important to emphasize that our results do not rest on an assumption of symmetric perfect information among the parties. In fact, the most significant implication of our model comes from an asymmetric information framework. That is, awarding a preliminary injunction in essence converts a property rule into a temporary liability rule: the party seeking the injunction has a limited call option, wherein she will have to pay court-determined damages if it turns out that the entitlement belongs to the other party. Knowing her private value and the distribution of harms to the other party from complying with the injunction, the liability-rule-like preliminary injunction harnesses the party’s private information. See, e.g., Kaplow & Shavell, supra note 11.

21. More generally, if the probability that the court will ultimately award the entitlement to defendant is equal to \(1 - P\), \(l_i\) is plaintiff’s value, and \(l_d\) is defendant’s value, then plaintiff will only seek a preliminary injunction if \((1 - P) \times l_i > (1 - P) \times l_d\). See discussion in Part III for a more formal and complete statement of this inequality.
I. ARTICULATED STANDARDS FOR PRELIMINARY INJUNCTIONS

As parties compete to prohibit or permit legally uncertain activities, courts are asked to allocate consequential legal entitlements in preliminary proceedings without the benefit of a full hearing. In his now-classic study, *The Standard for Preliminary Injunctions*, John Leubsdorf describes numerous, often inconsistent, articulated bases for preliminary relief: "Irreparable injury may or may not be mentioned. Sometimes the injunction must not disserve the public interest, sometimes it must serve the public interest, and sometimes only the equities of the parties count." Sometimes the decision turns on maintaining the status quo, and other times facilitating change is key. Articulated constraints on the merits of plaintiffs' claims indicate a similar lack of consistency: "One line of cases requires plaintiffs to show a fair question on the merits, another a substantial probability of success, another a reasonable certainty, and another a clear right." Professor Leubsdorf suggests a coherent rationale that underlies this apparent confusion in the judicial opinions. The objective, according to this rationale, is to prevent irreparable injury to the parties' legal rights. Historically, courts of chancery issued injunctions to prevent actions at law as well as to preserve them. Leubsdorf argues that this latter concern (i.e., preserving and protecting rights at law) was the precursor to contemporary preliminary injunction analysis. From this historical line, it is not difficult to see how one could arrive at a standard based on the prevention of irreparable injury to legal rights.

Yet, equitable courts sometimes issued preliminary injunctions that were not contingent on actions at law or actions in other courts. "In some instances, plaintiffs in suits properly instituted in Chancery needed immediate relief pending the Chancellor's decision on the merits. They might seek, for example, to stop equitable waste or to secure interim enforcement of a contract." Departing from this historical line of cases might lead one to emphasize a different standard for preliminary relief—a standard, for example, based on the avoidance of waste or efficient enforcement of contracts.

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25. Clearly visible traces of this objective were observable in eighteenth-century English common law courts, where the separation of legal and equitable proceedings frequently prompted judges to issue preliminary relief to protect rights at equity and law. *Id.* at 527-32.
26. *Id.* at 528 ("Only [this class of cases] raised problems calling for the kind of analysis we now apply, and the particularities of that class have shaped later learning on the standard for preliminary injunctions.").
27. *Id.* at 529.
28. Indeed, as Professor Leubsdorf notes, "[o]wing in part to Jeremy Bentham . . . the
In his essay, Leubsdorf himself was quite hostile to the notion of judges making utilitarian calculations when considering the issuance of preliminary injunctions: "The court's function is to protect rights, not to increase the gross national product." However, when rights are uncertain, as they are in preliminary hearings, why shouldn't courts consider whether granting the injunction will increase social welfare or avoid waste? This, admittedly, is not among the stated justifications for preliminary injunctions advanced in judicial opinions. These opinions, for the most part, take an ex post view, in which the articulated concern is that damages awarded at the conclusion of the case may be inadequate to compensate plaintiff for harm suffered during the pendency of the case.

A. Traditional Approaches

Despite the rhetorical variation in the case law, there is a widely shared view that the purposes served by preliminary injunctions are maintaining the status quo between the parties, preserving the court's ability to consider the case fully, and minimizing the harm caused by erroneous preliminary decisions. There is less apparent consensus on the best way to achieve these ends through the use of preliminary injunctions. Most courts, when deciding whether to grant an injunction, rely on a four-part standard that (to varying degrees) considers (1) plaintiff's likelihood of success on the merits, (2) the amount of irreparable harm, (3) the balance of hardships between the parties, and (4) the public interest.

utilitarian tide [that swept] away the division between law and equity [also] shaped thought on preliminary injunctions, setting that thought adrift in search of a new foundation." Id. at 532 (footnotes omitted). Could this tide not have carried judicial thought about preliminary injunctions to utilitarian shores? After all, it was around this time that "courts came to require plaintiffs seeking interlocutory relief to accept liability for resulting damage" to defendants. Id. at 534. And this requirement is, as we argue below, an essential move to assure efficiency through the use of preliminary injunctions.

29. Leubsdorf maintained this attitude: "Even in common law nuisance cases where the court must perform something like a cost-benefit analysis at trial, other considerations control at the interlocutory hearing." Id. at 543 n.101. Leubsdorf felt that at the interlocutory hearing, the court's "goal is to assess the probable loss of rights under various courses of action, not to appraise the net social benefit from those courses." Id. (emphasis added).

30. Id. at 555. Efficiency could never be a sufficient warrant for "interim accommodation," according to Leubsdorf. Irreparability is always a necessary condition: "The plaintiff must always demonstrate the possibility of irreparable loss." Id. at 551. Leubsdorf did, however, recognize one category of preliminary injunctions—so-called "statutory injunctions"—in which social policy may justify preliminary intervention without a showing of irreparability. In these instances, "[t]he goal is not to minimize loss of rights in specific cases, but to isolate classes of cases in which granting or denying relief under specified tests will minimize harm to public policies." Id. at 565. But, of course, public policy might reasonably include increasing aggregate social welfare or the gross national product.

31. See, e.g., Am. Hosp. Supply Corp. v. Hosp. Prods., 780 F.2d 589, 594 (7th Cir. 1986) ("The premise of the preliminary injunction is that the remedy available at the end of trial will not make the plaintiff whole; and, in a sense, the more limited that remedy, the stronger the argument for a preliminary injunction . . . .").
harm likely in the absence of the injunction, (3) a balancing of expected harms to plaintiff and those to defendant, and (4) the public interest.\textsuperscript{32} Within the jurisdictions that use this four-part standard, there is no uniform application.\textsuperscript{33} Courts outside these jurisdictions apply entirely different standards that may, for example, limit consideration to a combination of plaintiff’s probable success on the merits and her irreparable harm or a balance of hardships that favors plaintiff.\textsuperscript{34} The Seventh Circuit, for instance, manages this balancing of hardships by using a sliding-scale approach, which explicitly focuses on minimizing harm caused by any erroneous decisions.\textsuperscript{35}

B. The Error-Minimizing Leubsdorf-Posner Formulation

Professor Leubsdorf draws from his historical and theoretical analysis a rule that concisely captures the essential factors which should be considered in deciding whether a preliminary injunction should be granted. The preliminary injunction should be granted if the product of the probability that plaintiff will prevail and the amount of uncompensated harm plaintiff will suffer during the pendency of the litigation is greater than the product of the probability that defendant will prevail and defendant’s uncompensated costs of complying with the injunction. If one assumes Professor Leubsdorf’s posited objective, then his formulation can be seen as an elegant statement of the considerations underlying the decision to grant or deny a preliminary injunction.\textsuperscript{36} We depart from Professor Leubsdorf by adopting a different objective: inducing socially beneficial behavior during the pendency of litigation.

A simple numerical example may be helpful in illustrating the Leubsdorf rule.\textsuperscript{37} If plaintiff has a 60\% chance of prevailing at the conclusion of the case

\begin{itemize}
\item \textsuperscript{32} Lea B. Vaughn, A Need for Clarity: Toward a New Standard for Preliminary Injunctions, 68 OR. L. REV. 839, 839-40 (1989).
\item \textsuperscript{33} Morton Denlow, The Motion for a Preliminary Injunction: Time for a Uniform Federal Standard, 22 REV. LITIG. 495, 517-26 (2003).
\item \textsuperscript{34} See, e.g., A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001); ABKCO Music, Inc. v. Stellar Records, Inc., 96 F.3d 60 (2d Cir. 1996).
\item \textsuperscript{35} There is some question whether the Seventh Circuit has settled on a sliding-scale approach to balancing harms. See Jones v. InfoCure Corp., 310 F.3d 529, 534-35 (7th Cir. 2002); see also Denlow, supra note 33, at 529-30.
\item \textsuperscript{36} Many commentators, however, do not share his vision. See infra note 42.
\item \textsuperscript{37} Leubsdorf’s original numerical example is also illuminating. The structure, however, is a little convoluted, so we summarize it here in a footnote and use a simpler example in the text. “Suppose the plaintiff is an indigent who claims additional welfare payments of $20 per month. With these payments, he could buy food in bulk at reduced rates, increasing his purchasing power by $32 per month.” Leubsdorf, supra note 13, at 542 (footnotes omitted). The fact that the transaction will increase the value of the $20 welfare payment to $32 is “legally irrelevant,” and presumably the government cannot access this transaction directly. Assume that $20 is the most the plaintiff can convert in any given month and that a full trial will take five months to complete, during which time either the government will lose $100 (i.e., $20 each month of the trial) or the plaintiff will lose $160
\end{itemize}
and will suffer $1000 in damages during the pendency of the case which cannot be remedied by an eventual award of damages, plaintiff’s expected irreparable loss from not being granted the injunction is $600. If plaintiff has a 60% chance of prevailing, then defendant has a 40% chance of prevailing.\(^3\) If defendant’s costs of complying with the injunction are $2000 and defendant will not be compensated for any of these costs at the end of litigation, defendant’s expected irreparable loss if the injunction is granted is $800. Since defendant’s $800 expected irreparable loss if the injunction is granted exceeds the $600 expected irreparable loss that plaintiff will suffer if the injunction is not granted, the injunction should not be granted under this framework.

Judge Richard Posner adopted the Leubsdorf framework in a frequently cited and controversial opinion.\(^3\) Judge Posner prefaces his analysis by reviewing the relevant case law and concluding that “it is not possible to reconcile all the precedents, or even just all the ones in this circuit. But the apparent discord is mostly verbal.”\(^4\) He concludes that underlying the apparently inconsistent formulations is an effort to “minimize errors: the error of denying an injunction to one who will in fact (though no one can know this for sure) go on to win the case on the merits, and the error of granting an injunction to one who will go on to lose.”\(^5\) These “error costs” can be minimized, as explained by Professor Leubsdorf, by comparing the product of the probability of plaintiff’s success and the would-be uncompensated harm to plaintiff with the product of the probability of defendant’s success and defendant’s would-be uncompensated costs of complying with the injunction.

We have no quarrel with the error-minimizing formulation if one accepts, as Judge Posner and Professor Leubsdorf do, the conception of the preliminary injunction expressed in the rhetoric of the case law.\(^6\) We believe, however, (i.e., $32 per month). “Although calculable, these potential losses are irreparable because the plaintiff is judgment-proof and the defendant has sovereign immunity from a judgment for payments due in previous months.” Id. (footnotes omitted). Assume also that there is a 40% chance that plaintiff will prevail at the full hearing. Therefore, if the injunction is denied, plaintiff’s expected irreparable loss will be $64, which is a 40% chance of forever losing $160. Similarly, the expected irreparable loss to defendant if the injunction is granted is $60 (which comes from having to make payments of $100 that will—with a 60% chance—be deemed “legally unnecessary”). Id. “Since the estimated $64 loss from denying relief exceeds the estimated $60 loss from granting it, the judge should grant a preliminary injunction.” Id. (footnotes omitted).

38. Of course, in the real world, the likelihood of prevailing need not be (and often is not) so straightforward. Depending on how one understands success at trial, the probabilities need not sum to one. For the purposes of this example, and the subsequent analysis, we ignore this important complication and suggest that the curious reader review LAYCOCK, supra note 14, at 118-20.

40. See Lee, supra note 23, at 111 n.4.
42. Numerous commentators (academic and judicial), however, do take issue with this formulation. Within the Seventh Circuit, see, for example, American Hospital Supply Corp.,
that this conception embodies a compensatory, ex post view of the purpose of awarding damages that is at odds with the ex ante, incentive-oriented view of the purpose of awarding damages implicit in the "efficient conduct hypotheses" expressed by law and economics scholars. According to the Leubsdorf-Posner view, the purpose underlying the grant or denial of the preliminary injunction is to minimize the expected "irreparable" loss to both parties resulting from an erroneous grant or denial of the preliminary injunction. As a result, an erroneous grant or denial is of concern if the award of damages at the conclusion of the case would not be fully compensatory. Similarly, even a small chance of a wrongful grant or denial is of great concern if the award of damages at the conclusion of the case would fall very short of full compensation. By contrast, we our focus is whether judicial practice with respect to the grant of preliminary injunctions creates incentives for efficient conduct by defendant before and during the litigation.

Under our conception, an additional purpose of awarding damages at the conclusion of the case is to induce efficient conduct prior to the conclusion of the case. The traditional conception is exclusively focused on providing compensation for harm resulting from the erroneous grant or denial of a preliminary injunction. In a world in which plaintiff was certain to win and damages were fully compensatory, there would be no need to choose between the two conceptions of damages. Certain, fully compensatory damages at the conclusion of the case would ensure efficient behavior by defendant during the pendency of the litigation. There would be no role for a preliminary injunction. If an injunction were granted, it would direct defendant to do what she would do anyway. If no injunction were issued, defendant would, nevertheless, have the incentive to do what an injunction would have compelled her to do.

When, however, there is uncertainty regarding to whom the entitlement at issue will be assigned, as is often the case, it is necessary to choose one conception or the other. Under the traditional view, the relevance of the uncertainty is that it creates the possibility that the assignment of entitlement, implicit in the grant or denial of the preliminary injunction, may prove to be erroneous. The Leubsdorf-Posner rule governing the issuance of a preliminary injunction is designed to minimize the expected costs resulting from an erroneous grant of the entitlement. From an incentive-oriented view, the relevance of uncertainty is that it may make it impossible for the grant of damages at the conclusion of the case to ensure efficient conduct by defendant.

780 F.2d at 608-10 (Swygert, J., dissenting), and Ball Memorial Hospital, Inc. v. Mutual Hospital Insurance, Inc., 784 F.2d 1325, 1346-47 (1986) (Will, J., concurring). See also Laycock, supra note 14, at 118-23; Linda S. Mullenix, Burying (with Kindness) the Felicific Calculus of Civil Procedure, 40 Vand. L. Rev. 541 (1987); Linda J. Silberman, Injunctions by the Numbers: Less than the Sum of Its Parts, 63 Chi.-Kent L. Rev. 279 (1987); Vaughn, supra note 32.
C. Our Alternative Formulation

At this point, it may be useful to explain more fully our alternative formulation. First, we emphasize that liability determination is not instantaneous and is often uncertain at the times when the parties must make important decisions. These decisions generally have efficiency implications; we are concerned with how preliminary injunctions influence decisions during this period of indeterminacy. If the grant or denial of a preliminary injunction induces inefficient behavior, then a social loss occurs—a loss which cannot be undone by a subsequent transfer of money from one party to another. As a result, for our analysis, it is not of primary concern that plaintiff, by reason of the award of damages, is as well off as if there had been no infringement of her entitlement or that, by reason of reimbursement of compliance costs, defendant is as well off as if she had not complied with the injunctive orders. By contrast, the traditional view holds that no harm is done if plaintiff (assuming the injunction is denied) later receives sufficient compensation for harm caused by defendant’s infringement or if a defendant (assuming the injunction is granted) who ultimately prevails receives sufficient compensation for the costs of compliance. Pursuant to this view, it is unimportant whether the injunction is issued so long as adequate compensation is provided ex post. The adequacy of ex post compensation, under the traditional view, is an independent reason not to issue a preliminary injunction, but not so under our view. Under our framework, ex post compensation is never adequate by itself because it cannot eliminate the social loss resulting from the inefficient conduct. In simple terms, the traditional view focuses on distributing the loss between the parties. We focus on minimizing the loss.

Even with adequate ex post compensation, the need for preliminary injunctions remains, not only as a response to uncertainty but also as the result of a basic asymmetry in the substantive law. In most instances, injured parties can recover damages for harm caused by infringement of their legal entitlements, but someone who avoids a potential infringement, although not obliged to do so, can seldom recover the costs of such avoidance. This asymmetry creates a systematic bias toward infringement. Defendant prefers the certain benefits of infringing, at the discounted price of possibly being held liable. However, in those instances where a party who avoids a potential infringement, when not obliged to do so, can recover the costs of avoidance, there is no bias toward infringement and no need for a preliminary injunction.

Our analysis highlights a feature of a preliminary injunction regime that we believe has not been assigned sufficient importance. It is true that the issuance of a preliminary injunction assures performance by posing the certain threat of in terrorem damages if the injunction is violated. It is, however, also true that plaintiff can only obtain a preliminary injunction by assuming liability for defendant’s compliance costs if defendant prevails at the conclusion of the case. The preliminary injunction, then, counteracts the bias toward
infringement which would exist in its absence by threatening defendant with in terrorem damages, while rewarding her with possible compensatory damages if she prevails at the conclusion of the litigation.

By making the question of interest whether defendant will behave efficiently, we identify an important defect in the theoretical underpinnings of the traditional view of preliminary injunctions. Consider, for example, a case involving a threatened breach of contract. Two different questions arise here: first, whether it is better for defendant to perform, and second, whether the costs of nonperformance or performance—whichever is the efficient result—should be borne by plaintiff or defendant. Whether it is better for defendant to perform depends on whether the value of performance to plaintiff is greater or less than the highest valued option to defendant (the opportunity cost of performance). The question whether the costs of nonperformance or performance should be borne by plaintiff or defendant depends on whether, in the relevant contract or controlling legal rule, this risk has been assigned to plaintiff or defendant. The basic flaw of the traditional approach is that the question of who should bear the costs of nonperformance or performance constitutes the only element in the determination of whether performance will be compelled.

In the next Part, we elaborate on our analysis by posing a hypothetical case in which liability is uncertain. We then determine whether defendant will behave efficiently under each of three possible rules with respect to the issuance of a preliminary injunction: (1) the Leubsdorf-Posner error-cost-minimizing rule, (2) a rule that preliminary injunctions are never available, and (3) a rule that preliminary injunctions can always be obtained. After considering the traditional error-minimizing rule, we focus our attention on a hypothetical world in which no preliminary injunction is available. This exercise permits us to capture both the reasons why a preliminary injunction is needed and the problems that arise when preliminary injunctions are available. In the end, we conclude that it is optimal to allow a preliminary injunction whenever plaintiff is prepared to assume liability if, at the conclusion of the case, it is held that defendant was not obliged to bear the costs of performance.

II. MODEL AND ANALYSIS

We motivate this analysis by considering two hypothetical cases which pose the same analytic issues. In one case, there is a contract requiring

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43. In order to focus on the consequences of uncertainty, which we believe to be the most important piece in the preliminary injunction puzzle, we shall (in the model, but not generally) assume away an important complicating factor. Damages may be "too high" in the sense of exceeding the costs actually experienced as a result of conduct held to be unlawful or "too low" in the sense of being less than the costs actually experienced as a result of the conduct held to be unlawful. If damages are too high or too low, incentives will be impaired. A complete analysis of any incentive regime would have to take these possibilities into
defendant to deliver goods at a date during the pendency of the litigation. In the contract, however, there is an exculpatory clause which may excuse defendant from performing. However, uncertainty pervades as to how the exculpatory clause will be interpreted. Both parties agree that there is a 60% chance that plaintiff will prevail if defendant chooses not to perform and the "breach" is challenged in court. In the second hypothetical, plaintiff claims that defendant is committing a nuisance and is obliged to discontinue the harmful activity or eliminate its harmful effects. If defendant fails to do either, plaintiff contends that defendant will be responsible for paying damages to her for the harm that is caused. Defendant responds by claiming that plaintiff "came to the nuisance" and should, consequently, be denied relief. The parties agree that there is a 60% chance that plaintiff will prevail with respect to defendant's contention. We consider whether defendant will be induced to behave efficiently under each of the four possible rules.

For ease of exposition we focus on the contract hypothetical. Performance under the contract example, consisting of delivery of the goods, is analytically equivalent to the discontinuation of the harmful activity or rendering it harmless in the nuisance case. The claim of nonobligation by reason of the exculpatory clause is equivalent to the "coming to the nuisance" defense. The equivalence consists of the fact that, in invoking the exculpatory clause of the contract, defendant claims that plaintiff must bear the costs resulting from nondelivery of the goods; in the nuisance case, defendant

account. We simply assume away this complication.

44. As an explicit example of the contract hypothetical, consider the following: In 1988, PC Brand, Inc., a mail-order dealer of clone IBM personal computers, negotiated an "Advertising Rights Agreement" with Anthony Gold, the result of which provided PC Brand with a 23.5% discount on the standard advertising rates in PC Magazine. Gold v. Ziff Commc'ns Co., 553 N.E.2d 404, 406 (Ill. App. Ct. 1989). Anthony Gold, the founder of PC Magazine, acquired the original discount right in exchange for his control interest in the magazine. After several months, the new owners of PC Magazine determined that they were not required to continue the arrangement due to an improper assignment of the discount right. The initial agreement with Gold stipulated that the right was not assignable or transferable to other persons or entities, but could be used by a company in which Gold owned at least 51% of the voting stock.

In 1988, Gold formed PC Brand with Stephen Dukker, in which Gold held 90% of the outstanding shares of the company and Dukker held the remaining 10%. The owners of PC Magazine maintained that actual control rested with Dukker and "that Gold did not really own at least 51% of the voting stock ...." Id. Therefore, the magazine claimed the right had been assigned to PC Brand in contravention to the agreement. This claim raised a legitimate legal question that could not be answered before the next issue of the magazine was due to come out. Thus, PC Brand filed for a preliminary injunction to prevent the magazine from abandoning the agreement during the litigation concerning the assignment. Officials of the company testified that PC Brand had been formed to take advantage of the discounted advertising rate and that the operation of PC Brand was structured around the advertising discount .... [and] PC Brand would probably be forced out of business were it not able to advertise at the discount[ed] rate for even one month .... Id. at 407.
contends that, by reason of the "coming to the nuisance" defense, plaintiff must bear the costs imposed on her by defendant's nuisance activity. No matter who must bear the costs resulting from nondelivery of the goods or the continuation of the nuisance conduct, the different questions whether it is better that the goods are not delivered or whether it is more beneficial that defendant engage in the nuisance conduct must be answered.

A. The Leubsdorf-Posner Formulation of the Traditional Balancing Rule

The central focus of our analysis is whether delivery of goods, pursuant to a contract, is to occur during the pendency of the litigation. Defendant contends that, under the terms of an exculpatory clause in the contract, she is excused from supplying the goods at her expense. The traditional preliminary injunction rule employs a balancing of irreparable harms designed to minimize expected error costs. The court compares "the harm to plaintiff if preliminary relief is erroneously denied and the harm to defendant if preliminary relief is erroneously granted."45 The Leubsdorf-Posner formulation of the rule offers a precise statement of the error-minimizing approach. This approach is undertaken by comparing the product of the probability that plaintiff will prevail at the conclusion of the case and the uncompensated damages she will suffer if the injunction is not issued with the product of the probability that defendant will prevail and the costs of complying with the injunction that will not be compensated by the award of damages at the conclusion of the case. Thus, under the Leubsdorf-Posner rule, a preliminary injunction is awarded only if

\[ P \times H_p > (1 - P) \times H_d \]

where \( P \) is the probability that plaintiff will ultimately prevail at the conclusion of the full trial, \( H_p \) is the irreparable harm that plaintiff will suffer if the injunction is not granted, and \( H_d \) is the irreparable harm that defendant will suffer if the injunction is granted.

The traditional view of the preliminary injunction, including the Leubsdorf-Posner version, does not purport to create incentives for efficient behavior. Not surprisingly, then, neither of the factors which, under this rule, determine whether a preliminary injunction will be granted (i.e., irreparable harm and likelihood of plaintiff's success in securing damages at the conclusion of the case) would be included in a rule designed to induce allocatively efficient behavior. According to the traditional view, the court ought not to consider the full cost to plaintiff of not receiving the goods, but rather that portion of the cost which would not be offset by the award of damages to plaintiff at the conclusion of the case. Similarly, not all

performance costs of defendant are considered, but only those that would not be compensated if defendant prevails. But if the objective of the rule is to induce allocatively efficient behavior, all of the costs of each party should be compared to determine whether the value of the goods to plaintiff is greater or less than the cost to defendant of providing them to plaintiff. It is elementary that a decision mandating inefficient behavior results in the social cost of a misallocation of resources. A later monetary transfer does not change the magnitude of this loss.

The second factor included in the traditional test (i.e., likelihood of the parties' success) is equally inappropriate if the ultimate objective is to induce efficient behavior. When a plaintiff succeeds at trial, she will be awarded damages for the harm caused by defendant’s nonperformance at the conclusion of the case. The question of which party is to bear the costs of nonperformance is different from the question of whether it is efficient for defendant to provide the goods to plaintiff. This latter concern is the rationale for the doctrine of efficient breach. The essential premise of the doctrine is that defendant should perform only if it is efficient to do so. The question of who should bear the costs resulting from nonperformance is a separate one. If the exculpatory clause is construed so as not to free defendant from performing, defendant will be required to compensate plaintiff for the costs resulting from nonperformance. If the exculpatory clause is interpreted to free defendant from the obligation to perform, plaintiff will bear the cost of nonperformance. The same reasoning applies if performance is efficient. If the exculpatory clause is construed favorably for defendant, plaintiff will be obliged to reimburse defendant for her costs of performance. If the clause is construed favorably for plaintiff, defendant will be required to bear the costs of performance. For these reasons, it is pure happenstance whether a preliminary injunction granted under the traditional rule leads to efficient or inefficient outcomes. A refusal to issue the injunction may leave defendant unconstrained when she should be constrained, and granting the injunction may leave defendant constrained when she should be unconstrained.

B. If Preliminary Injunctions Were Never Available

The first alternative to the traditional rule we consider is one in which plaintiffs are unable to obtain preliminary injunctions in any circumstances. We consider two variants of such a rule. Under the first variant, a defendant who performs under the contract and is later adjudged not to have been obliged to do so can recover her costs of performance. In the second variant, reimbursement for performance costs is not available. We conclude that if compensation is available to cover performance costs, defendant will perform when it is efficient to do so. Absent reimbursement, as in the second variant, defendant will not perform even when performance is efficient.
1. Incentives when compensation is provided for nonobligatory performance

Whether defendant delivers the goods depends in large part on her opportunity costs of doing so (i.e., her outside option). We define defendant's outside option as $I_A$, plaintiff's value of the goods as $I_P$, and the probability that plaintiff will be given the entitlement at the end of a full hearing as $P$, where $P = 60\%$ for the purposes of our hypothetical. By delivering the goods, defendant avoids all expected liability and gains a net expected benefit of $(1 - P)I_A$, assuming that she is compensated for the costs of supplying the goods when it turns out that she was not obligated to do so. Against this value, defendant weighed the net expected payoff of her nondelivery, which is determined by the difference between the expected costs of not delivering the goods to plaintiff, $P \times I_P$, and the benefits of not supplying the goods. That is, by not delivering the goods, defendant gets her outside option value with certainty. However, since defendant was already ensured to receive this value at the conclusion of the final hearing with probability $(1 - P)$, nondelivery merely adds probability weight $P$ to defendant's realization of her outside option. Unfortunately for defendant, nondelivery also adds the probability $P$ that she will be held liable for plaintiff's value. Defendant takes all these considerations into account and delivers the goods only if her net expected payoff from delivery exceeds her net expected payoff from nondelivery, i.e.,

$$(1 - P)I_A > (1 - P)I_A + P \times I_A - P \times I_P$$

which simplifies to

$$P \times I_P > P \times I_A.$$

The inequality above implies that defendant will deliver the goods only if their value to plaintiff exceeds defendant's cost of supplying them (i.e., $I_P > I_A$). This private calculation is equivalent to the criterion for the assurance of allocative efficiency—namely, that the contract should be performed if and only if the value of performance is greater than its cost. The intuitive explanation of this result is as follows: Assume, for example, that $I_P = 1000$, $I_A = 900$, and $P = 60\%$. Allocative efficiency favors delivery because plaintiff values the goods more than defendant. Yet, it would seem that defendant might choose not to perform and thereby gain 900 (the value of the goods to her) while incurring an expected liability of only 600 (a 60\% chance of being forced to pay compensation of 1000 to plaintiff), leaving her with a net expected gain of 300. However, the analysis is not complete. If defendant does perform, she earns an expected gain of 360 (a 40\% chance of realizing her value of 900) with no associated liability.\(^{46}\) Therefore defendant is better off performing. The

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46. Thus by choosing nonperformance, defendant realizes only 540, or the difference between her value of possessing the goods with certainty and her expected compensation.
crucial point in this analysis is that nonperformance allows defendant to obtain a 60% gain in her overall value at a cost of 60% of plaintiff's value. Since the probabilities attached to the gains and costs of nonperformance are the same, the determinative factor is whether defendant or plaintiff values the goods more. This is, of course, the same comparison which determines whether performance will be efficient.

2. Incentives when there is no compensation for nonobligatory performance

Now consider an alternative formulation of the rule that preliminary injunctions are never available. Instead of defendant expecting to recover her costs of performance when she delivers although she ultimately would not have been required to do so (i.e., \((1 - P) l_\Delta\)), assume that she expects no compensation when she foregoes her entitlement to withhold delivery (i.e., 0). Under this assumption, defendant will deliver the goods only if

\[0 > (1 - P) l_\Delta + P \times l_\Delta - P \times l_\pi\]

which reduces to

\[P \times l_\pi > l_\Delta.\]

Note that this decision rule may lead to allocatively inefficient outcomes. Recall from the example above, in which \(l_\pi = 1000\) and \(l_\Delta = 900\), that the optimal outcome is that plaintiff should receive the goods. However, in this case, defendant earns an expected net gain of 300 (saving 900 in performance costs and incurring 600 in liability costs) by not delivering the goods. Defendant will therefore not deliver, which is the allocatively inefficient result.

C. If Preliminary Injunctions Were Always Available

Now consider a rule that is the opposite of the rule of "no preliminary injunctions with ex post damages": plaintiff can obtain a preliminary injunction as long as she is willing to assume liability for defendant's costs of complying with the injunction in the event that the court, at the conclusion of the case, rules in favor of defendant.

Moreover, this gain of 540 is purchased at the expense of assuming an expected liability of 600.

47. Generally, a party cannot (absent an express or implied agreement) perform and then later claim that she was not obligated to perform and, therefore, that she should be awarded damages equal to her opportunity costs of performance.

48. That is, defendant's expected costs of the breaching conduct \((60\% \times 1000 = 600)\) are less than her expected benefits \((100\% \times 900 = 900)\).
1. Incentives when compensation is provided for nonobligatory performance

Plaintiff will only seek the injunction if the value of the goods to her exceeds the costs to defendant of supplying the goods. We remind the reader that this conclusion holds only if plaintiff will be required to reimburse defendant for her compliance costs whenever the court, at the conclusion of the case, holds that plaintiff is obliged to bear the costs of nondelivery of the goods. To demonstrate this conclusion, we first note that obtaining the preliminary injunction gives plaintiff the monetary value of getting the goods with certainty (i.e., $l_\pi$), although it imposes liability with expected cost equal to $(1 - P)l_\Delta$. By refraining from obtaining the preliminary injunction, plaintiff receives the monetary equivalent of the value she places on the goods with probability (i.e., $P \times l_\pi$), while imposing no expected liability. Therefore, plaintiff will obtain the injunction only if

$$l_\pi - (1 - P)l_\Delta > P \times l_\pi$$

which reduces to

$$(1 - P)l_\pi > (1 - P)l_\Delta.$$

The inequality above implies that plaintiff will obtain the preliminary injunction only if she values the goods more than defendant does (i.e., $l_\pi > l_\Delta$). Therefore, this rule too provides the correct incentives in terms of allocative efficiency. This is because the determinative factor in plaintiff’s decision of whether to obtain the injunction is whether she values the goods more than defendant. By obtaining a preliminary injunction, plaintiff receives her value of the goods ($l_\pi$) with an increased likelihood of 40% and has to pay defendant’s value of the goods ($l_\Delta$) with an increased likelihood of 40% (compared to not seeking the preliminary injunction). So long as $40\% \times l_\pi > 40\% \times l_\Delta$ (or $l_\pi > l_\Delta$), plaintiff will obtain the preliminary injunction, and the result will be an efficient one. This result should be considered in light of our previous discussion. In the previous Part, we focused on the importance of the right to compensation when someone performs, and it is later determined she was not obligated to do so. We concluded that if this right exists, there would be no need for a preliminary injunction to encourage allocatively efficient behavior. What the present discussion demonstrates is that the preliminary injunction provides exactly such a right to compensation. In the present context, this right disciplines plaintiff to compel performance only when performance would be efficient.\(^{49}\)

Importantly, this result holds regardless of what plaintiff believes her chances of prevailing to be. Whatever the chances may be, plaintiff gains the same proportion of the value and the cost by assuming contingent liability for

49. The importance of this discipline becomes obvious in infra Part III.C.2.
defendant's cost of performance. Since the two proportions are identical, plaintiff's decision will depend on whether the value of the goods to her is greater or less than defendant's cost of supplying the goods.

We emphasize one important implication of this analysis. This rule could, in some circumstances, require defendant to deliver the goods even though the court holds at the conclusion of the case that plaintiff, rather than defendant, is obliged to bear the costs of performance. This could be characterized as coercive. However, as we discuss more fully in the next Parts, we see no problem with this situation so long as there is genuine uncertainty over the entitlement at the time when the preliminary injunction is sought.

2. Incentives when there is no compensation for nonobligatory performance

Finally, imagine plaintiff can always obtain a preliminary injunction without having to compensate defendant for nonobligatory performance ex post. Without the constraint of ex post compensation to defendants ultimately found not contractually obligated to perform, plaintiffs would compel too much performance. Plaintiff receives a payoff of \( l_\pi \) by compelling performance, whereas she gets only \( P \times l_\pi \) when performance is not undertaken. Since \( l_\pi \) is always greater than \( P \times l_\pi \), plaintiff will always seek an injunction.

D. Implications: An Asymmetry in Substantive Law

Comparing a world in which preliminary injunctions are never granted to one in which they can always be obtained, our analysis reveals that allocative efficiency is achievable so long as parties are compensated for their probabilistic interests in entitlements—which is to say defendant receives (in expectation) \( (1 - P)l_\Delta \) when the goods are delivered, and plaintiff receives \( P \times l_\pi \) when the goods are not delivered. Thus, if defendant delivers the goods and it is later determined that she was not obliged to do so, the presence or absence of preliminary relief will have no (allocative) efficiency implications.

\[ 50. \text{What plaintiff weighs when deciding whether to assume contingent liability for defendant's compliance cost in exchange for the increased probability of securing the goods resulting from the grant of the preliminary injunction is her net payoff from obtaining or not obtaining the preliminary injunction. In the end, she compares the expected value of increasing the chance of obtaining the goods against the cost of increasing the chance of being required to reimburse defendant for her costs of supplying the goods. No matter what plaintiff believes to be her chances of prevailing, the relative magnitude of these two values will be decisive in her decision whether to compel delivery through the preliminary injunction.} \]

\[ 51. \text{Where preliminary injunctions are available, the decision regarding preliminary delivery of the goods is in the hands of plaintiff: inequality } (1 - P)l_\pi > (1 - P)l_\Delta \text{ implies that the goods will be delivered to plaintiff whenever delivery is efficient (i.e., } l_\pi > l_\Delta). \]

\[ 52. \text{Where preliminary injunctions are unavailable, the decision of whether the goods} \]
so long as she is compensated for her "unobliged" delivery. The problem with this scenario is that defendants typically have no such right to recovery when they enjoin their own behavior, although they do have such right when their behavior is constrained by plaintiffs through preliminary injunction orders.

This simple, yet prevalent, asymmetry in the law provides a strong efficiency justification for preliminary injunctions even when damages are fully compensatory. Indeed, the availability of fully compensatory damages in this setting highlights the fact that preliminary injunctions essentially protect defendants by inducing plaintiffs to internalize defendants’ compliance costs when deciding whether to seek preliminary injunctions. Absent preliminary injunctions or private agreements, the law generally does not recognize this probabilistic interest, thereby encouraging inefficient self-help in the form of nonperformance and infringement by prospective defendants. Unfortunately, the traditional balancing of irreparable harms in the case law is at odds with the inherent efficiency properties of preliminary injunctions.

III. WHICH RULE SHOULD BE EMPLOYED?

Under the traditional rule, if damages are adequate, then preliminary injunctions are never granted. However, as argued in the previous Part, preliminary injunctions serve an important efficiency function even when
damages are perfectly adequate. The traditional balancing analysis obscures this function by unnecessarily predating the award on the likelihood of irreparable injuries and the probability that one party or the other must bear the costs of performance or nonperformance. For traditionalists, "the possibility of irreparable loss [is necessary] in order to rouse the court to action." But imagine a preliminary injunction rule (we will call it the "interim-efficiency rule") in which the court merely addresses the question whether defendant's behavior that plaintiff seeks to compel is efficient, without regard to irreparable harm to legal rights or the distribution of the costs of performance or nonperformance. We begin the discussion with this stark thought experiment and conclude with a discussion of a preliminary injunction liability rule, which we argue mimics significantly the apparent standard in many courts today.

A. Interim-Efficiency Rule

Under the interim-efficiency rule, plaintiff can compel defendant to provide the goods or services that are the subject of the contract only if she demonstrates that $l_r > l_d$ (i.e., it is allocatively efficient for defendant to do so). Because allocatively efficient behavior is the same whether or not defendant is obliged to compensate plaintiff if she is denied the benefits of performance, there is no necessity for the court to decide the compensation issue at the preliminary hearing. If the court believes that the conduct that plaintiff seeks to compel would be inefficient, it simply refuses to grant the injunction. Defendant, constrained only by the uncertain possibility of paying damages, will in many instances choose not to perform. At the conclusion of the case, the court can decide whether plaintiff is entitled to damages for harm resulting from defendant's failure to perform.

One obvious difficulty with this rule, as with all the rules, is that the factual issues it implicates are not easy to resolve. The court must determine the value of performance to plaintiff and the opportunity costs of performance for defendant. We do not minimize the difficulty of resolving these factual issues. We do, however, point out that the traditional balancing rule requires a determination of these issues as well as other difficult ones. The Leubsdorf-Posner formulation of the rule, like the interim-efficiency rule, requires the court to determine how much better off plaintiff would be if defendant performed ($l_r$) and how much worse off defendant would be if obliged to

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56. Leubsdorf, supra note 13, at 551. Leubsdorf adds a historical note as well: "While irreparable injury was mentioned occasionally as a ground for equitable intervention in the eighteenth century, the next century saw it invoked in virtually all the situations where injunctions issued to protect rights at law." Id. at 533.

57. Note that this formulation does not account for the uncertainty of the underlying litigation: "If courts could inflict loss on one party in order to increase the profits of another, the parties' probabilities of prevailing on the merits and the substantive law would drop out of preliminary injunction decisions." Id. at 555.
perform \((l_{\Delta})\). While this information is sufficient to help the court implement the interim-efficiency rule, the traditional rule requires more. To clarify, we will define irreparable harm \((H)\) as the difference between the harm suffered by party \(i\) \((l_{i})\) and the compensation that \(i\) will receive from the party who is liable for the harm \((c_{i})\). The irreparable harm to plaintiff is thus equal to \(H_{\pi} = l_{\pi} - c_{\pi}\), and the irreparable harm to defendant is equal to \(H_{\Delta} = l_{\Delta} - c_{\pi}\). Using this definition, the Leubsdorf-Posner formula may be rewritten as follows:

\[
P \times l_{\pi} - c_{\pi} \geq (1 - P) \times (l_{\Delta} - c_{\Delta}).
\]

Thus, in addition to finding \(l_{\pi}\) and \(l_{\Delta}\), the court must determine (1) whether the compensation awarded at the conclusion of the case will be adequate for both parties, (2) how likely it is that defendant will have to pay damages to plaintiff if no preliminary injunction is issued, and (3) how likely it is that plaintiff will have to pay damages to defendant if a preliminary injunction is issued. We do not wish to claim too much. All we say is that implementation of the interim-efficiency rule is no more costly, and probably less costly, than implementation of the Leubsdorf-Posner rule.\(^{58}\)

Beyond implementation, there remains the more central concern of the interim-efficiency rule's abandonment of the consideration of irreparable harm to the parties' legal rights. Most observers would agree that the court "should not, for instance, enjoin a legal strike even if it is shown that the injunction would profit the employer far more than it harms the employees."\(^{59}\) Of course, the legality of the strike is the issue that cannot be determined before the court rules on the injunction. Certainly, when the strike is lawful, the court ought not to enjoin it because it is efficient, nor should the court allow an unlawful strike that happens to be efficient. When, however, the court is uncertain about the legality of the conduct, which is the \textit{sin nan quo} of the preliminary injunctive action, the correct decision is less clear. Yet, suppose that "[a]n employer who seeks to enjoin a strike, for example, can be required to post bond to compensate his employees if it turns out that the strike was lawful."\(^{60}\) We believe that this standard, with or without emphasis on irreparability, ought to be more centrally located within the articulated preliminary injunction doctrine, regardless of whether one is primarily concerned about compensation, efficiency, or both. We refer to this standard as the "preliminary injunction liability rule," to which the discussion now turns.

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58. Irreparability or inadequacy of awards may be understood as something other than a shortfall in damages, as characterized above. For example, inadequacy may be driven by uncertainty or incommensurability of the award. These alternative understandings of irreparability and inadequacy do not, however, undermine our general point that the traditional rule imposes significantly greater evidentiary burdens on the court than an interim-efficiency rule.

59. Leubsdorf, \textit{supra} note 13, at 555.

60. \textit{Id.}
B. Preliminary Injunction Liability Rule

Under the liability-rule framework, a preliminary injunction would be awarded whenever a genuine issue over entitlement ownership is shown and plaintiff is prepared to assume liability if, at the conclusion of the case, it is held that defendant was not obliged to perform but for the injunctive orders. Importantly, the court need not engage in an analysis of irreparable harms ($H_\pi$ and $H_\Delta$). In fact, the court would only be required to determine one party’s value—namely, defendant’s compliance costs.\(^6\)

Plaintiff recognizes that she will have to pay $(1 - P)l_\Delta$ in expectation damages if the preliminary injunction is secured and also recognizes that the additional benefit of securing the preliminary injunction is only valued at $(1 - P)l_\pi$, because she already has probability $P$ of receiving $l_\pi$ at the end of the full hearing. Therefore plaintiff will post the bond and secure the preliminary injunction only if

$$(1 - P)l_\pi > (1 - P)l_\Delta,$$

which is equivalent to the socially efficient criterion. Thus, plaintiff’s decision to assume contingent liability for defendant’s compliance costs in order to secure the preliminary injunction ensures that the injunction will be sought only when performance is efficient.

The desirability of the preliminary injunction liability rule may be most compelling in the presence of asymmetric information among the litigants and the court, which we take to be the usual case. When litigants have better information than the court, the superior information held by plaintiff or defendant may be enlisted through a preliminary injunction order conditional upon plaintiff assuming liability for defendant’s compliance costs in the event that, at the conclusion of the case, it is held that plaintiff is obliged to bear the costs of defendant’s performance or nonperformance. If plaintiff’s ability to compensate defendant were in doubt, the court, as it presently may, could require plaintiff to post a bond to assure payment. To see how this rule would operate, assume that defendant’s costs of complying with the preliminary injunctive award ($l_\Delta$) are known to the court, while plaintiff’s costs resulting from being denied performance ($l_\pi$) are private information, known only to plaintiff.\(^6\) In this setting, plaintiff (who possesses superior information about the costs of nonperformance) can make efficient choices about whether to seek the preliminary injunction.

Admittedly, under this rule, the court, at the conclusion of the case, must

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61. With regard to efficiency, the determination of the parties’ value may also be widely inaccurate so long as the errors are unbiased. See Kaplow & Shavell, supra note 11, at 730 & n.50.

62. This assumption could be weakened by allowing defendant’s compliance costs ($l_\Delta$) to be more easily verified than plaintiff’s costs of being denied performance ($l_\pi$).
with sufficient accuracy (i.e., without bias) determine defendant's compliance costs, and plaintiff, in deciding whether to seek the injunction, must sufficiently anticipate what those costs will be. However, the requirement that plaintiff assume a contingent liability for defendant's compliance costs in order to secure the injunction provides a powerful incentive for plaintiff to determine what those costs will be. Moreover, the court will not have to determine the magnitude of these costs until after they are actually incurred and the case is finally determined. In light of all of this, we believe that, as a matter of legal process, this rule is superior to other rules which might be employed (in many important respects).

Despite its desirable features, the preliminary injunction liability rule must respond to the objections that are made about liability rules more generally. The strongest of these objections has been made in terms of rights and duties that are unjustly priced and purchased without the rights holder's or obligee's express consent. Akhil Amar, for instance, has voiced this objection in arguing that liability rules are generally inappropriate constitutional remedies; Charles Fried has issued a similar challenge to liability rules in contracts. There is, however, one key consideration that renders these constitutional and contractual challenges inapplicable to the preliminary injunction liability rule. In the context of the preliminary hearing, the ownership of the underlying rights has not been determined authoritatively. As a result, when the preliminary injunction is granted or denied, each party has an expected (probabilistic) interest in the entitlement. Since the entitlement does not clearly belong to either party, the challenge of unjust nonconsensual appropriation through a preliminary injunction liability rule holds less weight than when breach of contract or constitutional infringement is clear.

Put somewhat differently, legal uncertainty prior to an authoritative determination of the case is an inescapable reality. Analysis predicated upon one party or the other having the entitlement is simply not helpful. The issue is

63. While we assumed away the issue of whether ex post damages will be undercompensatory for our analysis, see supra note 43, the issue of course remains a salient consideration. If the court suspects (or defendant argues) that plaintiff will be judgment-proof or otherwise unable to compensate the defendant's nonobliged performance, then this factor should surely weigh on (though not necessarily be determinative of) the court's willingness to grant a preliminary injunction.

64. Leubsdorf, supra note 13, at 555 (footnotes omitted) ("In some cases, of course, a forced sale of this kind will be impractical or unjust, and the court should consider loss of freedom as one of the costs of this approach.").

65. See generally AMAR, supra note 12.


67. Consider, for example, the question of a possible breach when contractual obligations are uncertain. As the promisor believes that she is not obligated to perform, nonperformance with the risk of possible damages is a sensible route since, as we mentioned earlier, the promisor will face significant hurdles in trying to receive compensation for performance that is not legally required.
what is to be done in a world characterized by uncertainty. We believe that, taking everything into account, the liability rule we propose is a candidate for dealing with a problem that has received far too little attention. We concede that one possible outcome if the rule were adopted would be that someone who is ultimately determined to be free to act in a particular way, without suffering adverse legal consequences, would be compelled to act in this way by the issuance of a preliminary injunction and the threat of in terrorem damages if that injunction is violated. Of course the "taking" in this outcome also has the possibility of later compensation in the form of reimbursement for compliance costs at the conclusion of the case.

Quite a different challenge to the preliminary injunction liability rule might come from those who argue that the parties do not need preliminary injunctions to provide compensation for nonobligated conduct when they can contract explicitly for compensation instead. Of course, the fact that the parties were unable to settle the dispute without seeking assistance from the court suggests that private bargaining may be too costly or otherwise unavailable to the parties. When private bargaining fails, the preliminary injunction liability rule avoids inefficiency while providing compensation.68

C. Error-Minimizing Rule in Practice

Among our primary goals in this Article is to demonstrate that, in principle, the Leubsdorf-Posner rule will not induce efficient behavior prior to and during the course of the litigation. With this specific goal in mind, we have not considered at length the objections to the Leubsdorf-Posner rule raised by those who share their view of the objective sought to be accomplished by its implementation (i.e., minimizing error costs).69 Two related ideas underlie these objections: (1) the precise, numerical formulation of the rule unduly limits the discretion of the judge ruling on the application for a preliminary injunction, and (2) there is really no feasible way to quantify the variables implicated by the rules.

We merely note these objections. More interestingly, however, it appears that for these or other reasons, the courts have in actual practice declined to

68. Indeed, according to Professor Leubsdorf, "[this rule] replicates the settlement of the preliminary injunction motion that the parties might have reached had not transaction costs, irrationality, or other factors prevented them. [Additionally, it] transfers the surplus produced by the more efficient course of action to the party legally entitled to it." Leubsdorf, supra note 13, at 555. Whether this latter claim is true depends on the type of remedy given to defendant. If the defeated plaintiff must disgorge all profits earned as a consequence of the wrongly granted injunction, then the surplus does move to the party with the legal entitlement. If the remedy is compensation for defendant's compliance costs during the time between the wrongly granted preliminary injunction and the conclusion of the final hearing, then the greater part of the surplus will not be transferred to the entitled party.

69. See sources cited supra note 42.
apply the Leubsdorf-Posner rule. As formulated by Judge Posner, the comprehensive balancing of expected costs occurs only if plaintiff establishes both "more than a negligible" chance of succeeding and irreparable injury. These represent, if you will, plaintiff's prima facie case for preliminary relief. What the Leubsdorf-Posner rule does, in effect, is provide a means for presenting defendant's case against preliminary relief. Moreover, both of these cases are arrayed on the same monetary dimension to determine which case is stronger.

What actually occurs, however, is that plaintiffs who are denied preliminary relief are held either to not satisfy the "more than negligible" standard or to have failed to demonstrate irreparable injury. We have been able to unearth only one instance in which a plaintiff was denied relief because defendant's expected costs if the injunction were erroneously granted would have exceeded plaintiff's expected costs if the injunction were erroneously denied. And in this instance, the comprehensive balancing was only an alternative ground of decision.

The single instance in which plaintiff was held to have satisfied the two preliminary requirements but was denied relief on the basis of the comprehensive balancing rule occurred in Hendricks Music Co. v. Steinway, Inc. In that case, Steinway terminated Hendricks as a dealer in accordance with the distribution agreement between the parties. Hendricks claimed, however, that the termination violated several sections of the antitrust laws. The court exhaustively analyzed these claims and concluded that Hendricks had not satisfied the threshold requirement with respect to its likelihood of success. Nevertheless, the court proceeded to engage in the comprehensive balancing of the expected harms to both parties, although it seemed that, given the court's view that plaintiff had only a very small chance of success, the balancing of expected harms would inevitably favor defendant. However, the court took great pains in comparing the irreparable harm that would be suffered by each party if the preliminary injunction were granted or denied. The court concluded that, in the particular circumstances of the case, defendant would suffer greater harm from being unable to terminate plaintiff as a dealer than plaintiff would suffer from being terminated.

Although it has been cited in hundreds of cases, the Leubsdorf-Posner rule is not settled law. Preliminary injunction decisions are hardly ever based on the comparison of expected losses in the event of erroneous grants or denials. We can only speculate why the Leubsdorf-Posner rule is so rarely relied upon to justify the denial of a request for a preliminary injunction. The opinions offer little guidance. Perhaps more interestingly for purposes of this Article is that what the courts do, if not what they say, is very close to what we characterize as the preliminary injunction liability rule. Once plaintiff makes out her not-

70. 689 F. Supp. 1501 (N.D. Ill. 1988).
71. See supra notes 35 and 42.
very-demanding prima facie case for the preliminary injunction, defendant is protected—not by a determination that her expected costs from the injunction exceed plaintiff’s costs from not receiving the injunction, but rather by the assurance of compensation for compliance costs if she prevails at the conclusion of the case. Plaintiff makes the decisive choice that determines whether the preliminary injunction will be granted by deciding whether to assume contingent liability for defendant’s compliance costs and secure the injunction.

CONCLUSION

Our analysis demonstrates that the difficulty in creating efficient incentives for behavior occurring prior to the conclusion of litigation results from (1) uncertainty as to whether plaintiff or defendant is to bear the costs to plaintiff resulting from defendant’s nonperformance and (2) the absence of an effective right to compensation for a party who performs when not obliged. When these factors are present and plaintiff is unable to secure a preliminary injunction, there is a systematic bias toward infringement of entitlements. The traditional balancing rule for the issuance of preliminary injunctions does not provide a means for counteracting this bias. If courts followed a rule permitting plaintiff to secure a preliminary injunction if she were prepared to assume liability for defendant’s compliance costs (if it were ultimately held that defendant was not obliged to perform) and a rule requiring a finding that performance would be efficient before granting a preliminary injunction, they could, in principle, induce efficient behavior.

The choice between the two rules depends on the sum of error and process costs that would be incurred in implementing the rules. The efficacy of the rule that freely allows preliminary injunctions depends critically on an accurate (or at least unbiased) determination of the opportunity costs of performance to defendant. The efficacy of the rule requiring a finding that performance would be efficient depends critically on the accuracy of the determination as to whether defendant or plaintiff values the goods more. Thus, we have arrived at the now-familiar question whether a liability rule (the free grant of the injunction subject to liability for defendant’s compliance costs) or a property rule (granting the injunction if plaintiff values the goods more than defendant) is the preferable one to adopt.\(^\text{72}\) We believe that the liability rule is the one that should be employed. We would, however, constrain its application to only those situations in which a legitimate dispute as to the proper assignment of the underlying entitlement can be shown to exist.
