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Framing Frivolons Litigation: A Psychological Theory

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This Article uses an often-overlooked component of prospect theory to develop a positive theory of frivolous or low-probability litigation. The proposed Frivolous Framing Theory posits that the decision frame in frivolous litigation induces risk-seeking behavior in plaintiffs and risk-averse behavior in defendants. Because plaintiffs in frivolous litigation have a greater tolerance for risk than the defendants they have sued, plaintiffs in frivolous litigation have "psychological leverage" in settlement negotiations, which is likely to lead to plaintiff-friendly settlements or bargaining impasse. This, in turn, suggests that reformers concerned about frivolous litigation should target reform efforts at plaintiffs' decisionmaking in frivolous suits.

INTRODUCTION

Frivolity has its place, but apparently not in litigation. Nothing about the civil justice system raises the ire of politicians, judges, lawyers, legal academics, public interest groups, and the public quite like "frivolous litigation."

While it is not at all clear that this ire is well placed,² it is clear that many of the civil justice system's primary players and spectators

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See, for example, John Lande, Failing Faith in Litigation? A Survey of Business Lawyers' and Executives' Opinions, 3 Harv Neg L Rev 1, 26 (1998) (reporting that 53 percent of inside counsel and 14 percent of outside counsel in his survey believe that more than half of the cases filed against businesses are frivolous); Robert G. Bone, Modeling Frivolous Suits, 145 U Pa L Rev 519, 520 (1997) ("[T]here is widespread belief that frivolous litigation is out of control. Many people cite frivolous suits as the cause of the litigation system's most serious ills—huge case backlogs, long delays and high trial costs."); Valerie P. Hans and William S. Lofquist, Jurors' Judgments of Business Liability in Tort Cases: Implications for the Litigation Explosion Debate, 26 L & Soc Rev 85, 95 (1992) (reporting survey results showing that 83 percent of jurors in cases involving business defendants either "agree" or "strongly agree" that there are far too many frivolous lawsuits); John W. Wade, On Frivolous Litigation: A Study of Tort Liability and Procedural Sanctions, 14 Hofstra L Rev 433, 433 (1986) ("The problem of frivolous civil litigation has plagued the common law since the court system became mature and, indeed, prior to that time. Frivolous lawsuits cause appreciable larm to many persons, and in many ways.").

' See, for example, Marc Galanter, News from Nowhere: The Debased Debate on Civil Justice, 71 Denver U L Rev 77 (1993) (asserting that the common complaint that "the courts are brimming over with frivolous lawsuits," like other common complaints about the civil justice system, "is false, but in a complicated way"); Herbert M. Kritzer, The English Experience with the English Rule: How 'Loser Pays' Works, What Difference it Makes, and What Might Happen Here 12 n 35 (Institute for Legal Studies 1992) ("I know of no evidence on what proportion of cases filed are arguably frivolous; the frivolous case debate is sustained primarily through anec-

are deeply concerned about the persistence of frivolous suits, both because frivolous suits are "bad" and because the courts cannot adequately process *non*frivolous suits as long as frivolous suits clog the system.

This concern has led to numerous reform efforts by legislatures and courts over the past couple of decades. Congress has recently enacted securities reform legislation, the Advisory Committee on the Federal Rules of Civil Procedure has amended Rule 11, several state legislatures have toughened their sanctions provisions, and the Supreme Court has eased procedural law to make summary judgment more readily available. Each of these reforms, in whole or part, was designed to remedy the frivolous litigation "problem."

dotes."); Herbert M. Kritzer, Let's Make a Deal: Understanding the Negotiation Process in Ordinary Litigation 75 (Wisconsin 1991) (arguing that there is no evidence of large numbers of frivolous cases involving plaintiffs who sue solely to extort a settlement up to the amount of defendants' costs of responding); Bone, 145 U Pa L Rev at 596 (cited in note 1) (conceding that "we have no hard empirical evidence bearing on the nature or seriousness of the [frivolous litigation] problem").

See Private Securities Litigation Reform Act of 1995, Pub L No 104-67, 109 Stat 737, codified at 15 USC §§ 77z-1-78u-5 (Supp 1997). See also Report of the Banking, Housing and Urban Affairs Committee, S Rep No 104-98, 104th Cong, 1st Sess (1995), reprinted in 1995 USCCAN 679, 689 ("In crafting this legislation, the Committee has sought to strike the appropriate balance between protecting the rights of victims of securities fraud and the rights of public companies to avoid costly and meritless litigation. Our economy does not benefit when strike suit artists wreak havoc on our Nation's boardrooms and deter capital formation.").

- Rule 11 authorizes courts to sanction lawyers, law firms, and parties responsible for presenting an improper submission to the courts. See FRCP 11. Originally enacted in 1937, the Supreme Court Advisory Committee on Civil Rules toughened Rule 11 in 1983 to increase its deterrent effect on frivolous litigation. See FRCP 11 Advisory Committee Note (1983) ("Greater attention by the district courts to pleading and motion abuses and the imposition of sanctions when appropriate, should discourage dilatory or abnsive tactics and help to streamline the litigation process by lessening frivolous claims or defenses."). According to one commentator, the 1983 amendment to Rule 11 became "the most controversial amendment to the Federal Rules since their adoption a half-century ago." Carl Tobias, Some Realism About Empiricism, 26 Conn L Rev 1093, 1093 (1994). Perhaps not surprisingly, then, the Advisory Committee amended Rule 11 again in 1993 to soften its impact. See FRCP 11 Advisory Committee Note (1993) (noting that the 1993 revision "places greater constraints on the imposition of sanctions and should reduce the number of motions for sanctions presented to the court"). Its central purpose, however, is still deterrence of frivolous litigation. See FRCP 11(b) and Advisory Committee Note (1993) (providing that "the purpose of Rule 11 sanctions is to deter"); John Shapard, et al, Report of a Survey Concerning Rule 11, Federal Rules of Civil Procedure 1,3 (Federal Judicial Center 1995) (explaining that the 1993 amendments "provided that the purpose of Rule 11 sanctions is solely the deterrence of objectionable filings").
- 'See Byron C. Keeling, Toward a Balanced Approach to 'Frivolous' Litigation: A Critical Review of Federal Rule 11 and State Sanctions Provisions, 21 Pepperdine L Rev 1067, 1073 n 25 (1994) (identifying the numerous state sanction provisions modeled at least in part on the 1983 amendments to Rule 11).
- 'See Celotex Corp v Catrett, 477 US 317, 323-24 (1986) ("One of the principal purposes of the summary judgment rule [FRCP 56(c)] is to isolate and dispose of factually unsupported claims or defenses, and we think it should be interpreted in a way that allows it to accomplish this purpose."); Anderson v Liberty Lobby, Inc, 477 US 242, 247-48 (1986) ("By its very terms, this standard [FRCP 56(c)] provides that the mere existence of some alleged factual dispute be-

Remedying the frivolous litigation problem, of course, requires reformers to identify or diagnose the litigation behavior they seek to reform. Only if the reformers have at least some understanding of how litigants behave in frivolous litigation can they hope to develop mechanisms that will curb that behavior.

The existing models of frivolous litigation, upon which the reformers have at least implicitly relied, assume litigants are "rational actors" who make risk-neutral decisions to maximize the value of litigation outcomes. According to these rational actor models, plaintiffs pursue frivolous claims because they believe they can use cost or information asymmetries to extort settlements, and defendants decide whether to settle or defend based on their assessments of the costs they will incur or on the basis of imperfectly informed assessments of the merits of plaintiffs' cases.

These rational actor models undoubtedly explain much frivolous litigation behavior. Unfortunately, however, they rest on the untenable assumption that the litigants pursuing and defending against frivolous claims make outcome-maximizing decisions. While litigants may very well seek to maximize outcomes in frivolous litigation, they are in fact unlikely to do so because individuals seldom make outcome-maximizing decisions when faced with the kind of risk and uncertainty that plague the litigation process.

To explain how individuals actually make decisions under such risky conditions, 10 cognitive psychologists Daniel Kahneman and

tween the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact."); Matsushita Electric Industrial Co v Zenith Radio Corp, 475 US 574, 586 (1986) ("When the moving party has carried its burden under Rule 56(c), its opponent must do more than simply show that there is some metaphysical doubt as to the material facts."). See also Samuel Issacharoff and George Loewenstein, Second Thoughts About Summary Judgment, 100 Yale L J 73, 74 (1990) (noting that the Supreme Court's "summary judgment trilogy seems consistent with the spirit of the 1983 revisions to the Federal Rules in encouraging the judiciary to screen as well as adjudicate cases").

^{&#}x27; See Bone, 145 U Pa L Rev at 522 (cited in note 1) (arguing that we "cannot make sound policy" without "a positive theory of frivolous litigation").

A decisionmaker who is indifferent between options with identical expected values is risk neutral. See, for example, A. Mitchell Polinsky, An Introduction to Law and Economics 53 (Little, Brown 2d ed 1989) (positing that where both parties are risk neutral, risk does not matter).

See notes 51-52.

[&]quot;For decision researchers, the term "risk" refers to decisions leading to "a few known outcomes, each of which occurs with a specific probability." Zur Shapira, Risk Taking: A Managerial Perspective 4 (Russell Sage Foundation 1995) (emphasis added). "Uncertainty," by contrast, refers to decisious leading to outcomes where "the probabilities of these outcomes are unknown." Id (emphasis added). For the classic treatment of risk and uncertainty, see Frank H. Knight, Risk, Uncertainty and Profit (Houghton Mifflin 1921). Despite the distinction between the terms, researchers often use them interchangeably. See, for example, Lola L. Lopes, Psychology and Economics: Perspectives on Risk, Cooperation, and The Marketplace, 45 Ann Rev Psych 197, 199 & n 1 (1994) (noting that researchers often use both "risk" and "uncertainty" to refer to the same choice phenomenon). Thus, "risky choice" is often "the term used conventionally to refer to all

Amos Tversky have developed a widely accepted account of decisionmaking called "prospect theory." The "most distinctive implication of prospect theory," according to Kahneman and Tversky, is that individuals tend to exhibit a "fourfold pattern of risk attitudes" when making risky decisions: (1) risk aversion for moderate-to-high-probability gains, (2) risk seeking for moderate-to-high-probability

but the most extreme instances of ignorance or ambiguity." Lola L. Lopes, Between Hope and Fear: The Psychology of Risk, 20 Advances Experimental Soc Psych 255, 256 (1987).

"Kahneman and Tversky proposed prospect theory in an article published in Econometrica in 1979. Daniel Kahneman and Amos Tversky, Prospect Theory: An Analysis of Decision Under Risk, 47 Econometrica 263 (1979). See also Amos Tversky and Daniel Kahneman, Rational Choice and the Framing of Decisions, 59 J Bus S251, S257-60 (1986) (contrasting their descriptive model of decisionmaking with the normative rational actor model); Daniel Kahneman and Amos Tversky, Choices, Values, and Frames, 39 Am Psych 341, 342-44 (1984) (discussing prospect theory's application to risky choice); Daniel Kahneman and Amos Tversky, The Psychology of Preferences, 246 Scientific Am 160 (Jan 1982) (employing prospect theory to analyze how individuals evaluate risky options and determine the consequences of their choices); Amos Tversky and Daniel Kahneman, The Framing of Decisions and the Psychology of Choice, 211 Science 453 (1981) (describing prospect theory generally).

Kahneman and Tversky's early work on prospect theory focused on decisionmaking under conditions of risk, but their most recent work has extended prospect theory to encompass decisionmaking under conditions of uncertainty as well. See Amos Tversky and Daniel Kahneman, Advances in Prospect Theory: Cumulative Representation of Uncertainty, 5 J Risk & Uncertainty 297, 298 (1992) (noting that their new version of prospect theory "extends the theory to uncertain as well [as] to risky prospects with any number of outcomes"). They have also extended the implications of prospect theory to riskless choice. See Amos Tversky and Daniel Kahneman, Loss Aversion in Riskless Choice: A Reference-Dependent Model, 106 Q J Econ 1039 (1991). Unfortunately, their most recent work on prospect theory is also their final work due to Amos Tversky's recent death. For celebrations of Tversky's contributions, see, for example, Eldar Shafir, Belief and Decision: The Continuing Legacy of Amos Tversky, 38 Cognitive Psych 3 (1999); David Laibson and Richard Zeckhauser, Amos Tversky and the Ascent of Behavioral Economics, 16 J Risk & Uncertainty 7 (1998).

"Tversky and Kahneman, 5 J Risk & Uncertainty at 306 (cited in note 11). Although Tversky and Kahneman's work on prospect theory culminated with this observation in their final piece on prospect theory in 1992, see id, they liad observed the fourfold pattern of risk attitudes, even if they had not used that term, in their earlier work as well. See also note 64. Other scholars have noted the significance of Tversky and Kahneman's observed fourfold pattern of risk attitudes. See, for example, George Wu and Richard Gonzalez, Curvature of the Probability Weighting Function, 42 Mgnit Sci 1676, 1676 (1996) ("[S]tudies have identified two critical empirical regularities that any good descriptive model [of decisionmaking] should accommodate: gain-loss asymmetry and 'nonlinearity in probability.' Together, these two regularities capture the 'fourfold pattern of risk attitudes': risk aversion for most gains and low probability losses, and risk seeking for most losses and low probability gains.").

"A risk averter is defined as one who, starting from a position of certainty, is unwilling to take a bet which is actuarially fair." Kenneth J. Arrow, *Essays in the Theory of Risk-Bearing* 90 (Markham 1971). See Kritzer, *Let's Make a Deal* at 166 n 18 (cited in note 2) ("The technical definition of risk aversion is that a risk-averse player will accept less than the 'expected value' of the gamble in lieu of playing the game; that is, given a 50-50 chance at \$10, a risk-averse player will accept something less than \$5 in lieu of playing the game.").

" A risk seeker's preference is the opposite of a risk averter's preference. That is, a risk seeker will reject "a sure thing in favor of a gamble of lower or equal expectation." Kahneman and Tversky, 39 Am Psych at 341 (cited in note 11).

losses, (3) risk seeking for low-probability gains, and (4) risk aversion for low-probability losses.

The first half of prospect theory's fourfold pattern, composed of risk attitudes #1 and #2, focuses on decisionmaking in the face of moderate-to-high probability gains and losses. When choosing between moderate-to-high probability gains and losses with equal expected values, Kahneman and Tversky have found that individuals make risk-averse choices when selecting between gains and risk-seeking choices when selecting between losses. Thus, individuals generally prefer a certain \$500 prize to a 50 percent chance at a \$1,000 prize, but would rather face a 50 percent chance at a \$1,000 fine than pay a certain \$500 fine.

The second half of the fourfold pattern, composed of risk attitudes #3 and #4, focuses on *low-probability* gains and losses. When choosing between low-probability gains and losses with equal expected values, Kahneman and Tversky have found that individuals make risk-seeking choices when selecting between gains and risk-averse choices when selecting between losses. Thus, individuals generally prefer a 5 percent chance at a \$1,000 prize to a certain \$50 prize, but would rather pay a certain \$50 fine than face a 5 percent chance at paying a \$1,000 fine.

Legal scholars have used the first half of Kahneman and Tversky's fourfold pattern of risk attitudes to develop an important theory of litigation behavior. The Framing Theory of Litigation¹⁶ posits that litigants, like decisionmakers generally, evaluate decision options rela-

[&]quot;The "expected value of an uncertain future outcome, such as the outcome of a trial, is defined as the value of that outcome if it happens, multiplied by the probability that it will happen." Bone, 145 U Pa L Rev at 529 (cited in note 1). Expected value calculations "enable decision makers to determine the sure price equivalent of a gamble." Richard Birke, Reconciling Loss Aversion and Guilty Pleas, 1999 Utah L Rev 205, 211.

[&]quot;Jeff Rachlinski is the leading proponent of the Framing Theory. See Jeffrey J. Rachlinski, Gains, Loses, and the Psychology of Litigation, 70 S Cal L Rev 113 (1996). Other contributors include Russell Korobkin and Chris Guthrie, Psychology, Economics and Settlement: A New Look at the Role of the Lawyer, 76 Tex L Rev 77 (1997) (applying the Framing Theory to lawyers' and clients' evaluations of settlement options); Linda Babcock, et al, Forming Beliefs about Adjudicated Outcomes: Perceptions of Risk and Reservation Values, 15 Intl Rev L & Econ 289 (1995) (applying the Framing Theory to data obtained from negotiators involved in a hypothetical product liability case); Russell Korobkin and Chris Guthrie, Psychological Barriers to Litigation Settlement: An Experimental Approach, 93 Mich L Rev 107, 129-42 (1994) (positing that the framing of an offer will affect settlement rates); Peter J. van Koppen, Risk Taking in Civil Law Negotiations, 14 L & Human Beli 151 (1990) (providing empirical support for the Framing Theory).

Interestingly, Robin Hogarth observed the Framing Theory pattern more than a decade ago. See Robin M. Hogarth, *Judgement and Choice* 105 (Wiley 2d ed 1987) ("Prospect theory therefore predicts that whereas the plaintiff would settle out of court (i.e. take the safe option), the defendant would prefer to go to court (i.e. the risky alternative)."); Robin M. Hogarth, *Ambiguity and Competitive Decision Making: Some Implications and Tests*, 19 Annals Operations Research 31, 38–41 (1989) (providing experimental evidence consistent with the Framing Theory).

tive to the current state of affairs and make risk-averse decisions when choosing between gains and risk-seeking decisions when choosing between losses. When deciding whether to settle a case or go forward to trial, the Framing Theory thus predicts that *plaintiffs* are likely to prefer the risk-averse option—settlement—because they view both settlement and trial as gains, while *defendants* are more likely to prefer the risk-seeking option—trial—because they view both settlement and trial as losses. Consistent with the first half of the fourfold pattern of risk attitudes, scholars have amassed a collection of empirical data demonstrating that the Framing Theory holds true in experimental settings where plaintiffs and defendants face *moderate-to-high probability* gains and losses. In other words, the Framing Theory explains behavior in what we might call "ordinary litigation."

While legal scholars have used the first half of prospect theory's fourfold pattern of risk attitudes to develop the Framing Theory, they have ignored the second half of the fourfold pattern, even though it too may have something important to tell us about hitigation behavior. The second half of the fourfold pattern suggests that individuals facing low-probability gains are likely to behave in a risk-seeking fashion, while individuals facing low-probability losses are likely to favor risk aversion. Assuming this pattern holds true in litigation, plaintiffs pursuing low-probability claims are likely to prefer the risk-seeking option—trial—while defendants are more likely to prefer the risk-averse option—settlement. Thus, hitigant behavior in frivolous litigation—the quintessential example of low-probability litigation.

This Article uses the second half of prospect theory's fourfold pattern of risk attitudes to develop a positive theory of frivolous or low-probability litigation that more accurately explains the behavior of plaintiffs and defendants embroiled in frivolous suits. The proposed "Frivolous Framing Theory," which supplements both the rational actor accounts of frivolous litigation and the Framing Theory's account of ordinary litigation, consists of two propositions:

First, the Frivolous Framing Theory posits that the decision frame in frivolous litigation induces risk-seeking behavior in plaintiffs and risk-averse behavior in defendants. Plaintiffs in frivolous litigation, in other words, are psychologically inclined toward trial, while defendants in frivolous litigation are psychologically inclined toward settlement.

Second, plaintiffs in frivolous litigation are likely to have an advantage in settlement negotiations in that they are relatively more risk

[&]quot; See Part II.B.

[&]quot; See Part III.A.

seeking than defendants. Because trial is more attractive to plaintiffs than defendants, plaintiffs are likely to demand more, and defendants are likely to offer more, than the expected value of plaintiffs' claims. If there is sufficient bargaining overlap between plaintiffs' inflated demands and defendants' inflated offers, the litigants in frivolous litigation will likely settle their disputes for an amount greater than the expected value of the litigation. If, however, there is no bargaining overlap—if plaintiffs' preference for risk—i.e., trial—exceeds defendants' preference for certainty—i.e., settlement—the litigants are likely to reach bargaining impasse, resulting in eventual adjudication of the claims through motion or trial.

Determining that plaintiffs and defendants behave differently in frivolous hitigation than in ordinary litigation is significant for two reasons. First, it is intrinsically valuable to understand how legal actors actually make decisions in litigation. Rather than rely on intuition, folk wisdom, or untested models of behavior, legal scholars should try, as Cass Sunstein observes, "to be as clear as possible on how human beings actually behave." This work, in other words, has positive or descriptive value.

Second, armed with an accurate understanding of the behavior of legal actors, we are in a better position to inform regulation. In describing the regulatory implications of the Framing Theory, for instance, Russell Korobkin and Tom Ulen contend that "the legal system may wish to focus its efforts on encouraging defendants (rather than plaintiffs) to settle" because of defendants' risk-seeking tendencies in *ordinary* litigation.²¹ If it turns out, as I argue it does here, that risk attitudes are reversed in *frivolous* litigation, the legal system should focus its efforts on encouraging plaintiffs (rather than defendants) to settle *frivolous* lawsuits. This work, then, has normative implications as well.

The Article proceeds as follows: In Part I, I explore the prevailing rational actor models of frivolous litigation and identify the flaw that limits their descriptive accuracy. In Part II, I explain prospect theory's

[&]quot;Bargaining overlap is a necessary, but not sufficient, condition for settlement because a variety of strategic, psychological, and structural barriers might also prevent the parties from reaching agreement. See Robert H. Mnookin and Lee Ross, *Introduction*, in Kenneth J. Arrow, et al, eds, *Barriers to Conflict Resolution* 3 (Norton 1995) (identifying various barriers to settlement).

²⁰ Cass R. Sunstein, Behavioral Analysis of Law, 64 U Chi L Rev 1175, 1175 n 3 (1997). See also Jon D. Hanson and Douglas A. Kysar, Taking Behavioralism Seriously: The Problem of Market Manipulation, 74 NYU L Rev 630, 689 (1999) (arguing that "a complex model with realistic predictive capabilities is far preferable to a simplified model that bears little relationship to actual behavior").

^a Russell Korobkin and Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 89 Cal L Rev (forthcoming 2000).

fourfold pattern of risk attitudes and examine its implications for litigation behavior generally. In Part III, I propose a psychological account of frivolous litigation. In it, I articulate my two-pronged Frivolous Framing Theory and report some experimental data supporting it. In Part IV, I explore why plaintiffs appear to engage in risk-seeking behavior in frivolous litigation. Finally, in Part V, I identify a regulatory approach to frivolous litigation that focuses on deterring plaintiffs from filing, and encouraging plaintiffs to settle, frivolous suits.

I. RATIONAL ACTOR ACCOUNTS OF FRIVOLOUS LITIGATION

The prevailing accounts of frivolous litigation are based on the economic model of suit and settlement.² The economic model posits that litigants make risk-neutral (or perhaps risk-averse) decisions to

The economic model of suit and settlement itself is based on expected utility theory, the modern era's dominant account of decisionmaking under risk or uncertainty. Expected utility theory's central tenet is that risk-neutral or risk-averse decisionmakers make decisions to maximize their expected utility. See, for example, Leonard J. Savage, *The Foundations of Statistics* 105 (Chapman & Hall 1954) (noting that under expected utility theory a "person always decides in favor of an act the expected utility of which is as large as possible").

John von Neumann and Oskar Morgenstern proposed expected utility theory as an idealized account of how a rational individual would make decisions. See Scott Plous, *The Psychology of Judgment and Decision Making* 80 (Temple 1993) ("Von Nenmann and Morgenstern proposed expected utility theory as a 'normative' theory of behavior. That is, classical utility theory was not intended to describe how people *actually* behave, but how people *would* behave if they followed certain requirements of rational decision making."). For a general discussion, see John von Neumann and Oskar Morgenstern, *Theory of Games and Economic Behavior* (Princeton 1944). Other scholars, however, have developed descriptive expected utility theories in an attempt to explain actual human decisionmaking. See, for example, Paul J.H. Schoemaker, *The Expected Utility Model: Its Variants, Purposes, Evidence and Limitations*, 20 J Econ Literature 529, 537–38 (1982) (identifying seven of nime variants of expected utility theory as descriptive).

²⁶ See Cooter and Rubinfeld, 27 J Econ Literature at 1076 (cited in note 22) (analyzing both risk neutrality and risk aversion); Posner, 2 J Legal Stud at 418 n 28 (cited in note 22) ("assum[ing] risk neutrality"); Shavell, 11 J Legal Stud at 58 (cited in note 22) (assuming both plaintiffs and defendants are risk neutral); van Koppen, 14 L & Human Beh at 152 (cited in note 16) ("In studies of the decision to settle or to sue, it is usually assumed that parties are risk neutral; that is, that parties are biased neither towards continuing negotiations nor towards breaking off

²² See, for example, Janet Cooper Alexander, Do the Merits Matter? A Study of Settlements in Securities Class Actions, 43 Stan L Rev 497, 501 (1991) (noting that the "economic model of how cases are settled has come to be generally accepted"); Robert D. Cooter and Daniel L. Rubinfeld, Economic Analysis of Legal Disputes and Their Resolution, 27 J Econ Literature 1067 (1989) (reviewing the law and economics literature on litigation); George L. Priest and Benjamin Klein, The Selection of Disputes for Litigation, 13 J Legal Stud 1 (1984) (presenting an economic model that predicts which cases settle and which go to trial); Steven Shavell, Suit, Settlement, and Trial: A Theoretical Analysis under Alternative Methods for the Allocation of Legal Costs, 11 J Legal Stud 55 (1982) (proposing an economic model of the litigation process for purposes of assessing legal costs); Richard A. Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J Legal Stud 399 (1973) (using economic theory to understand the civil justice system's mechanisms for resolving legal disputes); John P. Gould, The Economics of Legal Conflicts, 2 J Legal Stud 279 (1973) (applying the economic model to the disposition of lawsuits); William M. Landes, An Economic Analysis of the Courts, 14 J L & Econ 61 (1971) (applying the economic model to cases in the criminal justice system).

maximize the value of hitigation outcomes.²⁶ When deciding whether to settle a case or go to trial, the economic model predicts that litigants compare the value of settlement to the expected value of trial and select whichever of the options promises more value. Because the costs associated with trial generally exceed the costs of settlement,²⁷ the economic model predicts that litigants will settle most cases because settlement is likely to yield the greatest return. Trials result only when litigants develop divergent views of their cases due to optimism²⁸ or informational asymmetries.²⁹

Building on the core premises of the economic model of suit and settlement, law and economic scholars have developed two types of frivolous hitigation models: asymmetric cost and asymmetric information models.³⁰

negotiations.").

See, for example, Rachlinski, 70 S Cal L Rev at 117 (cited in note 16) (noting that the economic models "also allow for risk-averse decisionmaking, since litigants are assumed to maximize utility and not merely wealth."); W. Kip Viscusi, *Product Liability Litigation with Risk Aversion*, 17 J Legal Stud 101, 103 (1988) (assessing in products liability litigation "how the decisions to drop and to settle a claim are affected by risk aversion, as well as low risk aversion affects the settlement amounts").

³⁶ See Priest and Klein, 13 J Legal Stud at 4 (cited in note 22) ("According to our model, the determinants of settlement and litigation are solely economic, including the expected costs to parties of favorable or adverse decisions, the information that parties possess about the likelihood of success at trial, and the direct costs of litigation and settlement. The most important assumption of the model is that potential litigants form rational estimates of the likely decision."); Shavell, 11 J Legal Stud at 56-57 (cited in note 22) ("If the plaintiff does decide to bring suit, it is assumed that he and the defendant will reach a settlement if and only if there exists some settlement amount that both he and the defendant would prefer to going to trial.").

" "Indeed, trial costs are so much greater than settlement costs that many authors choose the simplifying assumption that settlement costs are nil." Cooter and Rubinfeld, 27 J Econ Literature at 1075 (cited in note 22).

³ See Robert H. Gertner, Asymmetric Information, Uncertainty, and Selection Bias in Litigation, 1993 U Chi Roundtable 75, 81 ("[P]arties litigate rather than settle in the optimism model when they are sufficiently optimistic about the outcome of litigation. They will not settle if the difference between the net amount the victim expects to receive and the total amount the injurer expects to pay is greater than the total costs of litigation. That, in essence, is the basic optimism model of settlement and litigation.").

"See id at 87 (noting that divergent expectations "based on differences in information rather than on differences in opinion" account for trials according to the asymmetric information model of litigation); Leandra Lederman, Which Cases Go to Trial?: An Empirical Study of Predictors of Failure to Settle, 49 Case W Res L Rev 315, 323 (1999) ("Asymmetric information models, also based on divergent expectations by the parties, allow party estimates of outcome to differ not based on party optimism but based instead on information held by only one party (asymmetric information), so that one side has a truer estimate of the likely outcome at trial.").

"The seminal work on the basic economic model of litigation occurred in the early 1970s with the publication of the Gould, Landes, and Posner articles. See note 22. The early efforts to model frivolous litigation occurred in the mid-1980s. See, for example, D. Rosenberg and S. Shavell, A Model in which Suits are Brought for their Nuisance Value, 5 Intl Rev L & Econ 3 (1985) (applying a strategic model of litigation to frivolous suits); I.P.L. P'ng, Strategic Behavior in Suit, Settlement, and Trial, 14 Bell J Econ 539, 548-49 (1983) (same).

A. Asymmetric Cost Models

Asymmetric cost models assume that both plaintiff and defendant know that plaintiff's claims are frivolous. When a rational plaintiff and a rational defendant are both aware that plaintiff's claims are frivolous, hitigation seems unlikely. The rational plaintiff should be reluctant to file suit because he recognizes that he is unlikely to recover anything through trial or settlement, and the rational defendant who knows that the plaintiff's suit is frivolous is unlikely to respond favorably to it. Proponents of asymmetric cost models argue, however, that frivolous hitigation is hikely to occur even where the hitigants are fully informed because of the litigation costs the civil justice system imposes on defendants.

The first asymmetric cost model, developed by David Rosenberg and Steven Shavell,³² posits that frivolous litigation persists because the defendant must incur the cost of responding to plaintiff's frivolous complaint. Given that the defendant must pay the costs of responding, a rational plaintiff will file a frivolous complaint because he assumes he will be able to recover a settlement from the rational defendant up to the amount of the defendant's cost of responding.33 Suppose, for instance, that a rational plaintiff believes he has a 1 percent chance of recovering \$5,000 at trial (a \$50 expected trial verdict). Suppose further that the plaintiff knows it will cost defendant \$500 in legal fees to file an answer or a motion to dismiss or some other responsive pleading. Given this knowledge, the rational plaintiff will file suit on the theory that the rational defendant is likely to pay him up to \$500 to settle the claim.3 "[T]he plaintiff," in short, "will find it profitable to file his nuisance claim . . . whenever the cost of filing is less than the defendant's cost of defense."35

Although the Rosenberg-Shavell model may explain frivolous hitigation behavior in cases where defendants have no choice but to incur substantial response costs, critics contend that the model's explanatory power is limited because defendants' response costs are not likely to be very high. Avery Katz explains, for instance, that a defendant who knows a suit to be frivolous can merely respond with a blanket denial of the plaintiff's allegations. This will suffice to avoid a de-

[&]quot; The asymmetric cost models, in other words, are complete information models.

See Rosenberg and Shavell, 5 Intl Rev L & Econ at 3-6 (cited in note 30).

³ Id at 3.

³ Id at 4–5.

³⁵ Td at 4

^{*} See, for example, Lucian Arye Bebchuk, Suing Solely to Extract a Settlement Offer, 17 J Legal Stud 437, 439 (1988) (arguing that the Rosenberg-Shavell model "is applicable only to situations where the defendant must incur significant responding costs before the plaintiff must incur any significant litigation costs").

fault judgment and will shift the burden of the next expenditure back to the plaintiff."37

Lucian Bebchuk proposed a more nuanced asymmetric cost model. According to Bebchuk's model, frivolous litigation persists because a plaintiff can credibly threaten to go to trial due to the fact that he incurs litigation costs in stages." Once plaintiff has "sunk" sufficient litigation costs at one stage of the proceeding, he can maintain a credible threat to continue pursuing litigation "by virtue of the small fraction of the litigation costs that remains to be incurred."40 Because plaintiff and defendant recognize early on that this phenomenon will occur later in the process, plaintiff's threats have credibility throughout the process, and defendant has an incentive to take those threats more seriously than she otherwise might.41

The asymmetric cost models-like the Rosenberg-Shavell and Bebchuk models-have their flaws, but they provide an important insight into frivolous hitigation. According to these models, plaintiffs and defendants make economically rational decisions to file, settle, and try frivolous suits based on the costs associated with pursuing and defending against such claims.

Asymmetric Information Models

Although the asymmetric cost models provide insight into frivolous litigation, Robert Bone contends that "[f]rivolous litigation is most likely to occur under conditions of asymmetric information." In

[&]quot; Avery Katz, The Effect of Frivolous Lawsuits on the Settlement of Litigation, 10 Intl Rev L & Econ 3, 4 (1990). See also Bone, 145 U Pa L Rev at 538 (cited in note 1) (arguing that in complete information models "the defendant knows all the material facts and need not worry about preparing for trial, so she should be able to get away with making simple demals"). But see Lisa Bernstein, Understanding the Limits of Court-Connected ADR: A Critique of Federal Court-Annexed Arbitration Programs, 141 U Pa L Rev 2169 (1993). Bernstein comes to the defense of the Rosenberg-Shavell-type asymmetric cost model by pointing out that "a legal claim may impose additional costs on the defendant regardless of whether the plaintiff would ultimately prevail." Id at 2203-04. She contends that when a lawsuit imposes a "cloud on title" to an asset held by defendant, the value of the claim is determined not merely by defendant's costs of responding but also "by the length of time that the plaintiff can maintain the suit before having a dispositive judgment entered against him, the cost to the defendant of informing relevant third parties or the market about the strength of the claim, and the cost to third parties of verifying information released by the defendant." Id at 2204. "Consequently, it may be rational for the defendant to settle for an amount that far exceeds his litigation response costs." Id at 2204-05.

^{*} See Lucian Arye Bebchuk, A New Theory Concerning the Credibility and Success of Threats to Sue, 25 J Legal Stud 1 (1996).

[&]quot; Id at 4.

Id.

Bone, 145 U Pa L Rev at 524 (cited in note 1).

asymmetric or incomplete information models, one of the parties knows that the suit is frivolous but the other party does not. 45

Most asymmetric information models assume that plaintiff is the informed party. These "informed-plaintiff models" posit that frivolous litigation occurs because the plaintiff is able to capitalize on the private information she possesses about the merits of her suit. In Katz's version of an informed-plaintiff model, for instance, a rational plaintiff with a frivolous claim files suit because she knows defendant does not know whether her claim is frivolous or genuine. The rational defendant, uncertain about the merits of plaintiff's suit, decides whether to settle or defend based "on his estimate of the probability that the suit is genuine, as updated by any inferences he can draw from the plaintiff's decision to bring suit."

Other asymmetric information models assume that the defendant, rather than the plaintiff, possesses private information about the merits of plaintiff's suit. This situation might arise, for instance, where plaintiff files suit without adequately investigating the claim, and defendant has full knowledge about the behavior giving rise to the claim. According to Bone's elaborate informed-defendant model, a prospective plaintiff who is uncertain about the merits of her suit can assess the merits by conducting a prefiling investigation, by conducting formal discovery, or by using any settlement offer the defendant makes as a measure of the merits of her claim. Knowing this, the rational defendant will make low settlement offers in both meritorious

[&]quot; See id at 537.

[&]quot;The assumption that plaintiff might have private information about the frivolousness of her case seems reasonable. See Bone, 145 U Pa L Rev at 542 (cited in note 1) ("The informed-plaintiff model fits a number of different litigation settings—for example, a negligence suit in which liability turns on contributory negligence and in which the defendant cannot observe the plaintiff's conduct, or a products liability case in which the plaintiff knows he did not use the defendant's product.").

I borrow the term "informed-plaintiff model" from Robert Bone. See id at 542.

[&]quot; See Katz, 10 Intl Rev L & Econ at 4-5 (cited in note 37).

[&]quot; Id at 5. Bebchuk also advanced an informed-plaintiff model in which a rational defendant might settle with a rational plaintiff in a frivolous case because the "defendant might be uncertain whether the plaintiff would go to trial" dne to "private information" the plaintiff has about "the expected value to him of going to trial." Bebchuk, 17 J Legal Stud at 440 (cited in note 36). See also Bruce H. Kobayashi and Jeffrey S. Parker, No Armistice at 11: A Commentary on the Supreme Court's 1993 Amendment to Rule 11 of the Federal Rules of Civil Procedure, 3 S Ct Econ Rev 93, 118–37 (1993) (proposing an informed-plaintiff model of litigation with Rule 11 sanctions); A. Mitchell Polinsky and Daniel L. Rubinfeld, Sanctioning Frivolous Suits: An Economic Analysis, 82 Georgetown L J 397, 404–06 (1993) (introducing an informed-plaintiff model for analyzing plaintiff's decision to sue and defendant's decision to seek sanctions).

[&]quot;See Bone, 145 U Pa L Rev at 550 (cited in note 1) ("Examples include medical malpractice suits in which the patient has no direct knowledge of what the doctor did; antitrust and civil rights suits that depend on the defendant's intent, motivation or similar state of mind; and securities fraud class actions that are only thinly investigated in the rush to be the first to file.").

[&]quot; See id at 550-66.

and frivolous cases to try to communicate to the plaintiff that her case lacks merit. Plaintiffs, in turn, will become aware of this behavior and will thus rely on discovery as the way to assess the merits of their cases. Defendants will therefore be inclined to make more generous settlement offers to plaintiffs in both frivolous and nonfrivolous cases to avoid the costs of discovery.⁵⁰

Like the asymmetric cost models, the asymmetric information models present a persuasive account of frivolous litigation. According to these models, frivolous litigation persists because rational plaintiffs and rational defendants make decisions about whether to file, settle, and try frivolous cases under uncertain conditions created by informational asymmetries.

C. Limits of the Rational Actor Models of Frivolous Litigation

The existing models—which contend that cost and information asymmetries are responsible for frivolous litigation—undoubtedly explain much frivolous litigation behavior. It seems plausible that some rational plaintiffs file frivolous claims and some rational defendants decide whether to settle or defend against such claims based on anticipated litigation costs. It also seems plausible that the uncertainty created by informational asymmetries might account for the frivolous litigation behavior of some rational plaintiffs and defendants.

What troubles me about the existing models, though, is that they rest on the highly questionable assumption that plaintiffs and defendants make risk-neutral, economically rational decisions. The notion that plaintiffs and defendants seek to maximize economic outcomes in hitigation is not troubling, but the assumption that they are able to do so is problematic because research by cognitive psychologists has demonstrated that this assumption is inaccurate.

³⁰ See id at 552. Ivan P'ng also proposed an informed-defendant model of frivolous litigation. See P'ng, 14 Bell J Econ at 540-46, 548-49 (cited in note 30).

³ See, for example, Bone, 145 U Pa L Rev at 559 n 116 (cited in note 1) (assuming risk neutrality); Bebchuk, 25 J Legal Stud at 11 (cited in note 38) (same); Katz, 10 Intl Rev L & Econ at 8 (cited in note 37) (assuming that plaintiff would "accept a settlement if and only if it were at least as great as his expected gain from trial," but contending that "a plaintiff will always accept a settlement offer when indifferent"); Bebchuk, 17 J Legal Stud at 441 (cited in note 36) (same); Rosenberg and Shavell, 5 Intl Rev L & Econ at 6 (cited in note 30) (assuming risk neutrality); P'ng, 14 Bell J Econ at 542 (cited in note 30) (noting that "litigants are judifferent to risk").

The "economic models constructed to describe frivolous lawsuits show that settlement decisions are rational and based on a comparison between the settlement offer and the expected outcome of a trial." Philip M. Nichols, Symmetry and Consistency and the Plaintiff's Risk: Partial Settlement and the Right of Contribution in Federal Securities Actions, 19 Del J Corp L 1, 23 n 115 (1994). See, for example, Bone, 145 U Pa L Rev at 534 (cited in note 1) (noting that all of the formal models attempt to assess why a "rational" plaintiff would file a frivolous suit); Rosenberg and Shavell, 5 Intl Rev L & Econ at 3 (cited in note 30) (assuming "that each party acts in his financial interest and realizes the other will do the same").

II. PROSPECT THEORY AND LITIGATION

Cognitive psychologists try to understand how individuals actually make decisions. To do so, they collect empirical data that they use to develop descriptive accounts of decisionmaking or "behavioral decision theories." The leading behavioral decision theory is prospect theory. Developed by cognitive psychologists Daniel Kahneman and Amos Tversky, prospect theory demonstrates that individuals do not make decisions in the "rational" manner assumed by the economic models, but instead exhibit different risk preferences depending upon the characteristics of the decision problem.

A. Prospect Theory's "Fourfold Pattern of Risk Attitudes"

Prospect theory describes how individuals make decisions under risky conditions. The theory's "major empirical generalization about choice under risk" is that individuals exhibit a "fourfold pattern of

* Prospect theory is arguably the most prominent "challenger" to expected utility theory. See, for example, Rachlinski, 70 S Cal L Rev at 121 (cited in note 16) (referring to prospect theory as "[t]he leading example of a behavioral decision theory model of choice"); Plous, *Psychology of Judgment* at 95 (cited in note 23) (noting that prospect theory is "the most widely accepted" alternative to expected utility theory).

"See Kahneman and Tversky, 47 Econometrica at 263 (cited in note 11) (noting that human beings "systematically violate the axioms of expected utility theory"). See also R.J. Herrnstein, Rational Choice Theory: Necessary but Not Sufficient, 45 Am Psych 356, 357 (1990) (noting that "[e]xperimental findings by many decision researchers... have undermined the descriptive form of the [expected utility] theory by discovering choice phenomena that are consistent with (or at least not inconsistent with) principles of cognitive psychology, but inconsistent with rationality as commonly construed").

[&]quot; Behavioral decision theory "incorporates empirical observations of judgment and choice into a model of decisionmaking." Rachlinski, 70 S Cal L Rev at 121 (cited in note 16). For overviews of the application of behavioral decision theory to law, see Korobkin and Ulen, 89 Cal L Rev (cited in note 21) (advocating the abandonment of strict adherence to the rationality assumption in law and economics in favor of a more nuanced understanding of human behavior); Christine Jolls, Cass R. Sunstein, and Richard Thaler, A Behavioral Approach to Law and Economics, 50 Stan L Rev 1471 (1998) (proposing an approach to the economic analysis of law informed by a more accurate conception of human decisionmaking); Donald C. Langevoort, Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review, 51 Vand L Rev 1499 (1998) (analyzing the impact behavioral research on decisionmaking biases has had on legal scholarship); Sunstein, 64 U Chi L Rev at 1775 (cited in note 20) (outlining the principal findings of behavioral research and applying them to the law). But see Jennifer Arlen, Comment, The Future of Behavioral Economic Analysis of Law, 51 Vand L Rev 1765, 1768 (1998) (arguing that "conventional law and economics can be viewed as the first widely-adopted behavioral approach to law" and that "behavioral economic analysis of law is not yet-and may never be—in a position to supplant conventional law and economics"); Mark Kelman, Behavioral Economics as Part of a Rhetorical Duet: A Response to Jolls, Sunstein, and Thaler, 50 Stan L Rev 1577 (1998) (arguing that behavioral law and economics is inevitably interpretive and incomplete); Richard A. Posner, Rational Choice, Behavioral Economics, and the Law, 50 Stan L Rev 1551, 1560-61 (1998) (contending that behavioral law and economics is "merely a set of challenges to the theory-builders" rather than a theory itself).

risk attitudes." According to prospect theory, "risk attitudes" are a product of two factors:

First, risk attitudes depend upon whether the individual views the relevant decision options as "gains" or "losses" from her current position. Choices between gains tend to induce risk aversion, while choices between losses tend to encourage risk seeking.

Second, risk attitudes depend upon whether the individual estimates that uncertain decision options have a "moderate-to-high probability" or a "low probability" of occurring." Individuals are likely to

^{*} Tversky and Kahneman, 5 J Risk & Uncertainty at 307 (cited in note 11).

[&]quot;Technically, prospect theory posits that individuals assess the "subjective value" of decision options. See Tversky and Kahneman, 5 J Risk and Uncertainty at 299 (cited in note 11); Tversky and Kahneman, 59 J Bus at S257–58 (cited in note 11); Kahneman and Tversky, 39 Am Psych at 342 (cited in note 11); Kahneman and Tversky, 246 Scientific Am at 162 (cited in note 11); Tversky and Kahneman, 211 Science at 454 (cited in note 11); Kahneman and Tversky, 47 Econometrica at 275 (cited in note 11). The subjective value of a decision option is a measure of that option's deviation from a neutral reference point. Because the subjective value depends upon the option's relationship to a neutral reference point, options appear to be gains (for example, a chance at a dollar prize), losses (for example, a chance at having to pay a fine), or neutral outcomes (for example, zero or status quo). Kahneman and Tversky explain that "[p]eople do not normally think of relatively small outcomes in terms of states of wealth but rather in terms of gains, losses, and neutral outcomes (such as the maintenance of the status quo)." Kahneman and Tversky, 39 Am Psych at 342. See also Wu and Gonzalez, 42 Mgmt Sci at 1677 (cited in note 12) (identifying a "valne function, defined in terms of gains and losses" as one of the "two essential features of the prospect theory family").

To explain, when decisionmakers choose between options that appear to represent gains—for example, a certain small dollar prize or a gamble that might yield a much larger prize—they tend to assign more subjective value to the certain gain than to the gamble. When choosing between options that appear to represent losses—for example, paying a certain small fine or facing a chance of paying a much larger fine—decisionmakers tend to assign more subjective value to the gamble than to the certain loss. Because decisionmakers tend to have value functions that treat gains and losses this way, they tend to prefer the risk-averse option when choosing between gains and the risk-seeking option when choosing between losses. See Tversky and Kahneman, 5 J Risk & Uncertainty at 306 (cited in note 11); Tversky and Kahneman, 59 J Bus at \$258-59 (cited in note 11); Kahneman and Tversky, 246 Scientific Am at 162 (cited in note 11); Tversky and Kahneman, 211 Science at 454 (cited in note 11); Kahneman and Tversky, 47 Econometrica at 277-79 (cited in note 11).

[&]quot;Technically, prospect theory posits that individuals assign "decision weights" rather than "probabilities" to the likelihood a particular outcome will occur. See Tversky and Kahneman, 5 J Risk & Uncertainty at 299 (cited in note 11); Tversky and Kahneman, 59 J Bus at S262–63 (cited in note 11); Kahneman and Tversky, 39 Am Psych at 344–45 (cited in note 11); Kahneman and Tversky, 246 Scientific Am at 164 (cited in note 11); Tversky and Kahneman, 211 Science at 454 (cited in note 11); Kahneman and Tversky, 47 Econometrica at 275, 280 (cited in noted 11). Like a probability figure, a decision weight measures "the impact of events on the desirability of" an uncertain decision option. Kahneman and Tversky, 47 Econometrica at 280. A decision weight, however, is not merely a probability figure, but rather a function of probability reflecting Kahneman and Tversky's empirical observation that individuals tend to weight probabilities differently depending upon where they fall on the 0%–100% probability scale. See, for example, Kahneman and Tversky, 39 Am Psych at 344–45; Kahneman and Tversky, 246 Scientific Am at 164. See also Wu and Gonzalez, 42 Mgmt Sci at 1677 (cited in note 12) (identifying "a probability weighting function that permits probabilities to be weighted nonlinearly" as one of "two essential features of the prospect theory family").

underweight moderate-to-high probabilities, which enhances risk aversion for moderate-to-high probability gains and risk seeking for moderate-to-high probability losses. Individuals are likely to overweight low probabilities, which induces risk seeking for low-probability gains and risk aversion for low-probability losses.

Because options appear to represent "gains" or "losses" that occur with either "moderate-to-high" or "low" probability, prospect theory identifies four different decision frames: (1) a moderate-to-high-probability gains frame; (2) a moderate-to-high-probability losses frame; (3) a low-probability gains frame; and (4) a low-probability losses frame." Decisionmakers exhibit predictable risk attitudes in each of these four frames:

[∞] See Tversky and Kahneman, 5 J Risk & Uncertainty at 316 (cited in note 11); Tversky and Kahneman, 59 J Bus at S263 (cited in note 11); Kahneman and Tversky, 39 Am Psych at 345 (cited in note 11); Kahneman and Tversky, 246 Scientific Am at 164 (cited in note 11); Tversky and Kahneman, 211 Science at 454 (cited in note 11);

[&]quot;Kahneman and Tversky explain that "[u]nderweighting of moderate and high probabilities relative to sure things contributes to risk aversion in gains by reducing the attractiveness of positive gambles. The same effect also contributes to risk seeking in losses by attenuating the aversiveness of negative gambles." Kahneman and Tversky, 39 Am Psych at 345 (cited in note 11).

⁶ See Tversky and Kahneman, 5 J Risk & Uncertainty at 316 (cited in note 11); Tversky and Kahneman, 59 J Bus at S263 (cited in note 11); Kahneman and Tversky, 39 Am Psych at 345 (cited in note 11); Kahneman and Tversky, 246 Scientific Am at 164 (cited in note 11); Tversky and Kahneman, 211 Science at 454 (cited in note 11); Kahneman and Tversky, 47 Econometrica at 280–81 (cited in note 11).

[&]quot;The overweighting of low probabilities reverses the pattern described above," Kahneman and Tversky explain. "It enhances the value of long shots and amplifies the aversiveness of a small chance of a severe loss. Consequently, people are often risk seeking in dealing with improbable gains and risk averse in dealing with unlikely losses." Kahneman and Tversky, 39 Am Psych at 345 (cited in note 11). The overweighting of low-probability gains and losses "contributes to the appeal of lottery tickets and accident insurance, which are concerned with events that are highly significant and relatively improbable." Kahneman and Tversky, 246 Scientific Am at 164 (cited in note 11). There is a voluminous behavioral literature on lottery play and insurance behavior. See, for example, Edward J. McCaffery, Why People Play Lotteries and Why It Matters, 1994 Wis L Rev 71 (lottery behavior); John C. Hershey and Paul J.H. Schoemaker, Risk Taking and Problem Context in the Domain of Losses: An Expected Utility Analysis, 47 J Risk & Ins 111 (1980) (insurance behavior); Paul J.H. Schoemaker and Howard C. Kunreuther, An Experimental Study of Insurance Decisions, 46 J Risk & Ins 603 (1979) (same); Paul Slovic, et al, Preference for Insuring Against Probable Small Losses: Insurance Implications, 44 J Risk & Ins 237 (1977) (same).

[&]quot;Tversky and Kahneman, 5 J Risk & Uncertainty at 306 (cited in note 11) (identifying the fourfold pattern). The risk patterns with respect to moderate-to-high probability gains and losses are more stable than the risk patterns with respect to low-probability gains and losses for three reasons. First, risk tendency in the face of moderate-to-high probability gains and losses is a product of both the individual decisionmaker's subjective value function and weighting function. Id (noting that "the shapes of the value and the weighting functions imply risk-averse and risk-seeking preferences, respectively, for gains and for losses of moderate or high probability") (emphasis added). Risk tendency in the face of low-probability gains and losses, by contrast, is solely a product of the weighting function. Id (noting that "the shape of the weighting functions favors risk seeking for small probabilities of gains and risk aversion for small probabilities of loss"). Second, the weighting function is "not well-behaved" near the endpoints of the probability scale.

First, when confronting a moderate-to-high probability gains frame, decisionmakers tend to prefer the risk-averse option. In their most recent work on the subject, for instance, Tversky and Kahneman found that when they asked individuals to choose between a gain with a 50 percent or greater chance of occurring—e.g., a 50 percent chance at \$500—and the expected value of that gain—i.e., a certain \$250—88 percent of decisionmakers preferred the certain gain over the gamble. Decisionmakers generally prefer the risk-averse option in this moderate-to-high probability gains frame both because they are choosing between gains and because they are likely to underweight the 50 percent probability of winning the gamble.

Second, when decisionmakers face a moderate-to-high probability losses frame, they tend to prefer the risk-seeking option. Again, in their most recent work on the subject, Tversky and Kahneman found that when they asked individuals to choose between a loss with a 50 percent or greater chance of occurring—e.g., a 50 percent chance at a \$500 loss—and the expected value of that loss—i.e., a certain \$250 loss—87 percent of decisionmakers preferred the gamble. Decisionmakers generally prefer the risk-seeking option in this moderate-to-high probability losses frame both because they are choosing between losses and because they are likely to underweight the 50 percent probability of losing the gamble.

Third, when making decisions in a low-probability gains frame, decisionmakers tend to prefer the risk-seeking option, rather than the risk-averse option they are inclined to prefer in the face of higher-probability gains. Tversky and Kahneman found, for instance, that when they asked individuals to choose between a gain with a 10 percent or smaller chance of occurring—e.g., a 10 percent chance at \$500—and the expected value of that gain—i.e., a certain \$50—78 per-

Tversky and Kahneman, 5 J Risk & Uncertainty at 303 (cited in note 11); Kahneman and Tversky, 47 Econometrica at 283 (cited in note 11). Third, the underweighting of moderate-to-high probabilities is "more pronounced" than the overweighting of low probabilities. Tversky and Kahneman, 211 Science at 454 (cited in note 11).

[&]quot;Tversky and Kahneman, 5 J Risk & Uncertainty at 306 (cited in note 11).

[&]quot; Id at 308.

[&]quot;See notes 58, 60. See also Richard Gonzalez and George Wu, On the Shape of the Probability Weighting Function, 38 Cognitive Psych 129, 133, 145 (1999) (reporting "[d]ata at both the aggregate level and the individual level" that "are consistent with the inverse-S-shape weighting function" proposed by Tversky and Kahneman); Wu and Gonzalez, 42 Mgmt Sci at 1687–88 (cited in note 12) (corroborating and refining Tversky and Kahneman's observation that decisionmakers tend to underweight moderate-to-high probability gains).

[&]quot; See Tversky and Kalıneman, 5 J Risk & Uncertainty at 306 (cited in note 11).

[&]quot; Id at 308.

[™] See notes 58, 60.

ⁿ Tversky and Kahneman, 5 J Risk & Uncertainty at 306 (cited in note 11).

See text accompanying note 65.

cent of decisionmakers preferred the gamble.⁷³ Decisionmakers generally prefer the risk-seeking option in this low-probability gains frame because they are likely to overweight the 10 percent probability of winning the gamble.⁷⁴

Finally, when facing a low-probability losses frame, decisionmakers tend to prefer the risk-averse option, rather than the risk-seeking option they are inclined to prefer in the face of higher-probability losses. When Tversky and Kahneman asked individuals to choose between a loss with a 10 percent or smaller chance of occurring—e.g., a 10 percent chance at a \$500 loss—and the expected value of that loss—i.e., a certain \$50 loss—they found that 80 percent of decision-makers preferred the certain loss. Decisionmakers generally prefer the risk-averse option in this low-probability losses frame because they are likely to overweight the 10 percent probability of losing the gamble. Table 1 presents decisionmakers' predicted risk attitudes in each of prospect theory's four decision frames.

TABLE 1
PROSPECT THEORY'S FOURFOLD PATTERN

	Moderate-to-High Probability	Low Probability
Gains	risk aversion	risk seeking
Losses	risk seeking	risk aversion

Because decisionmakers exhibit predictable risk attitudes in each of these four frames, prospect theory asserts that decisionmakers exhibit a "fourfold pattern of risk attitudes." According to Tversky and

[&]quot; Tversky and Kahneman, 5 J Risk & Uncertainty at 308 (cited in note 11).

[&]quot;See notes 62-63. See also Gonzalez and Wu, 38 Cognitive Psych at 133, 145 (cited in note 67) (reporting "[d]ata at both the aggregate level and the individual level... consistent with the inverse-S-shape weighting function" proposed by Tversky and Kahnennan); Wu and Gonzalez, 42 Mgmt Sci at 1687-88 (cited in note 12) (corroborating and refining Tversky and Kahneman's observations that decisionmakers tend to overweight low-probability gains); Peter Wakker and Anne Stiggelbout, Explaining Distortions in Utility Elicitation through the Rank-dependent Model for Risky Choices, 15 Medical Decision Making 180, 183 (1995) (reporting that the overweighting of low-probability prospects "has been confirmed in many studies").

[&]quot; Tversky and Kahneman, 5 J Risk & Uncertainty at 306 (cited in note 11).

^{*} See text accompanying note 68.

Tversky and Kahneman, 5 J Risk & Uncertainty at 308 (cited in note 11).

See notes 62–63.

[&]quot; Tversky and Kahneman, 5 J Risk & Uncertainty at 306 (cited in note 11).

Kahneman, this fourfold pattern is "[t]he most distinctive implication" of the theory."

B. The First Half of the Fourfold Pattern and Ordinary Litigation

Legal scholars have used the first half of prospect theory's four-fold pattern of risk attitudes to describe ordinary litigation behavior. According to the first half of the fourfold pattern, decisionmakers faced with moderate-to-high probability gains tend to make risk-averse choices, while decisionmakers confronted with moderate-to-high probability losses tend to make risk-seeking choices. Building on this insight, legal scholars have developed the Framing Theory of Litigation.

The Framing Theory contends that litigation presents different decision frames to plaintiffs and defendants. Plaintiffs in ordinary litigation get to choose between a certain settlement offer and a moderate-to-high probability of recovering more at trial, while defendants must choose to pay a certain settlement amount or face a moderateto-high probability of losing more at trial. For plaintiffs in ordinary htigation, in other words, litigation appears to represent a moderateto-high probability gains frame, so they are likely to exhibit risk aversion. Defendants in ordinary hitigation, by contrast, are likely to view litigation as a moderate-to-high probability losses frame, so they are likely to exhibit risk-seeking preferences. Thus, the Framing Theory posits that in ordinary litigation, where plaintiffs and defendants face at least moderate probabilities of winning and losing at trial, plaintiffs are likely to prefer settlement, while defendants are likely to prefer trial. Table 2 presents litigants' predicted risk attitudes in ordinary htigation.

⁶ Id. Another key premise of prospect theory is "loss aversion," which refers to the phenomenon that "losses generally loom larger than the corresponding gains." Daniel Kahneman and Amos Tversky, Conflict Resolution: A Cognitive Perspective, in Arrow, et al, eds, Barriers to Conflict Resolution 44, 54 (cited in note 19). In their final work on prospect theory, Tverksy and Kahneman described the theory's "key elements" as: "1) a value function that is concave for gains, convex for losses, and steeper for losses than for gains, and 2) a nonlinear transformation of the probability scale, which overweights small probabilities and underweights moderate and high probabilities." Tversky and Kahneman, 5 J Risk & Uncertainty at 297–98 (cited in note 11). Their observation that the value function is "steeper for losses than for gains" refers to loss aversion.

[&]quot;Litigation," Rachlinski explains, "appears to supply a natural frame." Rachlinski, 70 S Cal L Rcv at 129 (cited in note 16). "When deciding whether to settle a case, plaintiffs consistently choose between a sure gain by settling and the prospect of winning more at trial. This closely resembles a gains frame.... Conversely, defendants choose between a sure loss by settling and the prospect of losing more at trial. This is a choice made in a loss frame." Id.

[&]quot;See Rachlinski, 70 S Cal L Rev at 119 (cited in note 16) (contending that "litigants' risk preferences will vary systematically, depending upon whether they are in the role of plaintiff or defendant"); Babcock, et al, 15 Intl Rev L & Econ at 296-97 (cited in note 16) ("A decision task framed in terms of potential gains typically produces risk averse behavior, whereas a decision

	Decision Frame	Risk Attitude	Explanation
Plaintiff	moderate-to-high probability gains	risk averse	value function & underweighting of probabilities
Defendant	moderate-to-high probability losses	risk seeking	value function & underweighting of probabilities

TABLE 2
RISK ATTITUDES IN ORDINARY LITIGATION

Scholars have found ample evidence in experimental settings demonstrating that plaintiffs facing moderate-to-high probability gains and defendants facing moderate-to-high probability losses exhibit risk-averse and risk-seeking behavior respectively. In all of these problems, however, plaintiff-subjects have either explicitly or implicitly faced a 30–80 percent chance of winning at trial, and defendant-subjects have either explicitly or implicitly faced a 30–80 percent chance of losing at trial. In other words, the existing work on Framing

task framed in terms of potential losses will be more likely to yield risk seeking behavior. The [sic] raises the possibility that plaintiffs, who are facing what may be perceived as gains, will exhibit risk aversion, whereas defendants, who may perceive potential losses, will be (relatively) more risk seeking."); Korobkin and Guthrie, 93 Mich L Rev at 109 (cited in note 16) ("[W]e predict that settlement rates will depend on whether the offeree understands a given settlement offer as a gain or loss. If an offeree views accepting an offer as a gain, he is likely to prefer settlement—the less risky alternative—to trial; if he sees the offer as a losing proposition, he is likely to prefer trial—the more risky option.").

" See Rachlinski, 70 S Cal L Rev at 135-38 (cited in note 16) (reporting plaintiff risk aversion and defendant risk seeking in a complicated property dispute involving moderate-to-high probabilities of plaintiff victory and defendant loss at trial); Babcock, et al, 15 Intl Rev L & Econ at 293-301 (cited in note 16) (finding that subjects playing the role of plaintiffs' attorneys exhibited risk aversion and subjects playing the role of defense attorneys exhibited risk seeking in hypothetical damages disputes); Korobkin and Guthrie, 93 Mich L Rev at 130-38 (cited in note 16) (finding evidence of framing in three more factually complicated scenarios in which plaintiff had at least a moderate probability of prevailing); van Koppen, 14 L & Human Belı at 160-62 (cited in note 16) (reporting results mostly consistent with the Framing Theory); Hogarth, 19 Annals Operations Research at 40-41 (cited in note 16) (reporting high settlement rates for plaintiffsubjects and low settlement rates for defendant-subjects in a hypothetical lawsuit scenario). See also Korobkin and Guthrie, 76 Tex L Rev at 96-101 (cited in note 16) (comparing litigant and lawyer risk tendencies in a hypothetical anto accident dispute involving moderate-to-high probabilities of plaintiff victory). Rachlinski also analyzed real-world data from Jury Verdicts Weekly and found litigation results consistent with his experimental work. See Rachlinski, 70 S Cal L Rev at 150-60 (cited in note 16). But see Don L. Coursey and Linda R. Stanley, Pretrial Bargaining Behavior within the Shadow of the Law: Theory and Experimental Evidence, 8 Intl Rev L & Econ 161 (1988) (arguing that legal cost allocation rules influence settlement negotiations and agreements).

" See, for example, Rachlinski, 70 S Cal L Rev at 135-38 (cited in note 16) (reporting plaintiff risk aversion and defendant risk seeking in a property dispute in which plaintiff faced either a 30 percent or 70 percent chance of winning at trial and defendant faced a corresponding 70 Theory explains how litigants are likely to behave in *ordinary* litigation—that is, where they face moderate-to-high probabilities of winning or losing at trial—but it does not explain how litigants are likely to behave in *frivolous or low-probability* litigation.

C. The Second Half of the Fourfold Pattern and Frivolous Litigation

For all the attention they have paid to the first half of prospect theory's fourfold pattern of risk attitudes, legal scholars have largely ignored the second half of the fourfold pattern despite its relevance to frivolous litigation behavior. According to the second half of the fourfold pattern, decisionmakers faced with low-probability gains tend to make risk-seeking decisions, while decisionmakers faced with low-probability losses tend to make risk-averse decisions.

Researchers have discovered that individuals exhibit this decisionmaking pattern when responding to simple mathematical problems and when reacting to more complicated decision problems as well. Donald Wehrung, for instance, recruited 127 executives from twenty-nine oil and gas firms based in Houston or Calgary to partici-

percent or 30 percent chance of losing at trial); Korobkin and Guthrie, 93 Mich L Rev at 130-35 (cited in note 16) (reporting risk aversion in the face of gains and risk seeking in the face of losses where both parties implicitly faced a 50 percent chance of prevailing in an auto accident case aud a property dispute); Hogarth, 19 Annals Operations Research at 41 (cited in note 16) (reporting plaintiff risk aversion and defendant risk seeking in nonambiguous experimental manipulations involving 50 percent and 80 percent probabilities of prevailing at trial). See also Korobkin and Guthrie, 76 Tex L Rev at 96-101 (cited in note 16) (comparing litigants aud lawyers risk tendencies in an auto accident dispute involving an implicit 50 percent probability of plaintiff victory at trial).

See, for example, Painela K. Lattimore, Joanna R. Baker, and Ann D. White, The influence of probability on risky choice: A parametric examination, 17 J Econ Beh & Org 377, 379 (1992) (finding that "[o]verweighting of 'small' probabilities was common" in subjects' reactions to luypothetical decision problems involving choices about criminal beliavior); Michele Cohen, Jean-Yves Jaffray, and Tanios Said, Experimental Comparison of Individual Behavior under Risk and under Uncertainty for Gains and for Losses, 39 Organizational Beh & Human Decision Processes 1, 10 (1987) (reporting in their study of elicited risk preferences that "on the gain side, subjects move from risk aversion to risk seeking when [probability] decreases," while "the opposite is true on the loss side"); John C. Hershey, Howard C. Kunreuther, and Paul J.H. Schoemaker, Sources of Bias in Assessment Procedures for Utility Functions, 28 Mgmt Sci 936, 944 (1982) (finding "considerable risk-seeking for gains, particularly for small amounts and low probabilities"); Hershey and Schoemaker, 47 J Risk & Ins at 121-22 (cited in note 63) (finding some evidence of risk aversion in the face of low-probability losses); Kahneman and Tversky, 47 Econometrica at 281 (cited in note 11) (reporting that 72 percent of subjects preferred a .001 chance at a \$5,000 gain over a certain \$5 gain, while 83 percent of subjects preferred a certain \$5 loss to a .001 chance at a \$5,000 loss); Malcohn G. Preston and Philip Baratta, An Experimental Study of the Auction-Value of an Uncertain Outcome, 61 Am J Psych 183, 188-89 (1948) (reporting evidence of overweighting of small probabilities in an auction study and concluding that "we are left with the hypothesis that when p [is less than or equal to] 0.05, players uniformly conceive the probability as somewhat higher, while with p [greater than or equal to] 0.25 players uniformly conceive the probability as somewhat lower").

pate in his study of risky decisionmaking. He presented these experienced oil executives with realistic decision problems involving the opportunity for big gains (up to \$60 million) and the threat of big losses (up to \$60 million). He found that 51.3 percent of executives were more risk seeking when faced with lower-probability gains than when faced with higher-probability gains (while only 9.7 percent were more risk averse). When faced with losses, by contrast, Wehrung found that 51.3 percent of executives exhibited greater risk aversion in the face of lower-probability losses than in the face of higher-probability losses (while only 11.5 percent exhibited greater risk seeking).

Steven J. Kachelmeier and Mohamed Shehata conducted a series of similar experiments with graduate students at Beijing University. Because of the relatively lower salaries paid in China, Kachelmeier and Shehata could offer subjects substantial monetary awards. In the highest payoff condition, for instance, they offered subjects an amount roughly equal to three months worth of income! Kachelmeier and Shehata found a pattern of strongly risk-seeking preferences for low-probability gain prospects. While risk seeking was slightly more pronounced for lower payoffs, they found that even in the highest payoff condition, the cash equivalent for a 5 percent bet (their lowest probability level) was, on average, three times larger than its expected value. In other words, the subjects demanded the certain equivalent of approximately two weeks pay to give up their 1 in 20 chance at three months pay!

The subjects in all of these experiments made decisions consistent with the second half of prospect theory's fourfold pattern. When faced

Donald A. Wehrung, Risk Taking Over Gains and Losses: A Study of Oil Executives, 19 Annals of Operations Research 115, 116, 119 (1989).

[&]quot; Id at 120.

²⁸ Id at 125. The remaining 38.9 percent exhibited the same risk-tendency in both the low-probability and high-probability decision problems. Id.

[&]quot; Id. The remaining 37.1 percent exhibited the same risk-tendency in both the low-probability and high-probability decision problems. Id.

⁷⁰ Steven J. Kachelmeier and Mohamed Shehata, Examining Risk Preferences Under High Monetary Incentives: Experimental Evidence from the People's Republic of China, 82 Am Econ Rev 1120 (1992).

[&]quot; Id at 1120.

²² Id at 1137.

[&]quot; Tversky and Kahneman, 5 J Risk & Uncertainty at 315 (cited in note 11) (summarizing Kachelmeier and Shehata experiments and results).

^{*} To make this concrete, assume that the students in this study earned \$500 per month or \$1,500 every three months. In the highest-payoff (\$1,500) and lowest-probability (5 percent) decision problem, students on average preferred the 5 percent chance at \$1,500 (an expected value of \$75) to certain cash payments up to three times the expected value of the gamble (\$225). Three times the expected value of the gamble is approximately two weeks' pay. In a 31-day month, the students in this hypothetical earn \$500, which means they earn \$16.13 per day or \$225.81 every two weeks.

with low-probability gains, they exhibited risk-seeking tendencies; when faced with low-probability losses, they tended to prefer the relatively more risk-averse option. Building on this insight, I develop a positive theory of frivolous litigation in the next part of the Article.

III. A PSYCHOLOGICAL ACCOUNT OF FRIVOLOUS LITIGATION

The Framing Theory, which builds on the first half of prospect theory's fourfold pattern of risk attitudes, describes how litigants are likely to behave in *ordinary* litigation. The Frivolous Framing Theory, which I propose in this part of the Article, builds on the second half of prospect theory's fourfold pattern of risk attitudes to describe how litigants are likely to behave in *frivolous* litigation.

I begin below by operationalizing frivolous litigation as low-probability litigation. Then, I introduce the proposed Frivolous Framing Theory, which is composed of two propositions. First, the theory posits that plaintiffs in frivolous litigation are likely to prefer trial—the risk-seeking option—while defendants are likely to prefer settlement—the risk-averse option. Second, given these psychological inclinations, the theory posits that plaintiffs and defendants in frivolous litigation are likely either to settle cases on terms advantageous to the plaintiff or to reach bargaining impasse.

A. Operationalizing Frivolous Litigation

Frivolous litigation can be a surprisingly elusive," controversial, and value-laden construct." For most litigants and attorneys in the

See Part II.B.

The Frivolous Framing Theory focuses on the decisionmaking tendencies of the *litigants* in frivolous litigation. Although lawyers undoubtedly play a significant role in litigation decision-making, the litigants retain ultimate authority to make substantive litigation decisions. See, for example, Model Code of Professional Responsibility EC 7-7 (ABA 1980) (providing that "it is for the client to decide whether he will accept a settlement offer"); Model Rules of Professional Conduct Rule 1.2(a) (ABA 1995) ("A lawyer shall abide by a client's decision whether to accept an offer of settlement of a matter.").

See, for example, Bone, 145 U Pa L Rev at 529 (cited in note 1) ("Most commentators use the term 'frivolous suit' without defining it, as if the meaning were obvious to all. But the concept is quite slippery,"); id at 596 ("Frivolous litigation is a complex phenomenon. It is difficult to define and almost impossible to observe, and it defies all attempts at simple explanation."); David B. Wilkins, Who Should Regulate Lawyers?, 105 Harv L Rev 799, 866 (1992) (noting that "the definition of frivolousness is notoriously vague"); Sanford Levinson, Frivolous Cases: Do Lawyers Really Know Anything At All?, 24 Osgoode Hall L J 353, 378 (1986) (noting that it is impossible "to explain (or teach to students) exactly what coustitutes the frivolous case as contrasted with those that are weak but nonetheless non-frivolous").

^{*} The term "frivolous litigation," in other words, is often innbued not only with positive content, but with normative content as well. See, for example, Bone, 145 U Pa L Rev at 531 (cited in note 1) (noting that "we label a lawsuit 'frivolous' not simply to say something about its merits, but to express a normative judgment that suit should not be brought"); Warren F. Schwartz and C. Frederick Beckner III, Toward A Theory of the 'Meritorious Case': Legal Uncertainty as a So-

trenches of the civil justice system, however, a frivolous case is simply a case in which the plaintiff has a low probability of prevailing at trial." While an occasional plaintiff might file a claim that both litigants recognize has *no* possibility of success, most litigants will predict that such claims have at least some chance of prevailing—maybe a 1 in 10 chance or a 1 in 20 chance or a 1 in 100 chance—because of the uncertainties inherent in the litigation process.¹⁰⁰

Litigants, after all, must make ex ante rather than ex post determinations about the likely merits of the plaintiff's case. 101 Before and

cial Choice Problem, 6 Geo Mason U L Rev 801 (1998) (noting that "terms such as 'frivolous' and 'strike' suits are employed with the apparent meaning that it is socially undesirable for cases with 'too little' chance of success to be brought"); Charles M. Yablon, The Good, the Bad, and the Frivolous Case: An Essay on Probability and Rule 11, 44 UCLA L Rev 65, 66 (1996) (contending that "[t]he usual, if slightly circular explanation [of frivolous claims], is that frivolous claims are those that are so lacking in merit they should never have been brought in the first place").

"For definitions of frivolous litigation consistent with this characterization, see Yablon, 44 UCLA L Rev at 67 (cited in note 98) (arguing that frivolous cases are "long shots that didn't pan out, rather than baseless claims that should never have been brought"); Polinsky and Rubinfeld, 82 Georgetown L J at 404 (cited in note 47) (assuming that "however a frivolous suit is defined, a frivolous plaintiff bringing the same claim as a legitimate plaintiff lias a lower probability of prevailing at trial than the legitimate plaintiff"); Bebcluk, 17 J Legal Stud at 437 (cited in note 36) (defining a frivolous suit as one in which "the chances of winning a trial are small"); P'ng, 14 Bell J Econ at 548 (cited in note 30) ("It seems reasonable to characterize a frivolous suit as an action where both sides know that it is very unlikely that a trial outcome will favor the plaintiff."). See also Black's Law Dictionary 668 (West 6th ed 1990) (defining a frivolous action as a "[g]roundless lawsuit with little prospect of success; often brought to embarrass or annoy the defendant") (emphasis added).

For other conceptions of frivolous litigation, see, for example, Bone, 145 U Pa L Rev at 530, 533 (cited in note 1) (rejecting "low-probability" as a definition of frivolous litigation and proposing instead that a "suit is frivolous (1) when a plaintiff files knowing facts that establish complete (or virtually complete) absence of merit as an objective matter on the legal theories alleged, or (2) when a plaintiff files without conducting a reasonable investigation which, if conducted, would place the suit in prong (1)"); Eric Rasmusen, Predictable and Unpredictable Error in Tort Awards: The Effect of Plaintiff Self-Selection and Signaling, 15 Intl Rev L & Econ 323, 337 (1995) (defining frivolous suits as negative expected value suits or "suits in which the expected value of the court award is less than the plaintiff's transaction costs of obtaining the award"); Rosenberg and Shavell, 5 Intl Rev L & Econ at 3 (cited in note 30) (defining a frivolous lawsuit as one "in which the plaintiff is able to obtain a positive settlement from the defendant even though the defendant knows the plaintiff's case is sufficiently weak that he would be unwilling or unlikely actually to pursue his case to trial").

¹⁷⁰ Consider Yablon, 44 UCLA L Rev 65 (cited in note 98) (contending that all frivolous cases are in fact long-shot cases due to a myriad of uncertainties associated with litigation).

¹³ Litigants typically assess the merits or likelihood of success of their claims prior to, and perhaps during, the litigation process, while judges assess the merits of a suit after it has been adjudicated. See, for example, id at 76–81.

A judge deciding a motion for sanctions is looking at a case that has already been adjudicated and found to be without merit. Although the law requires her to evaluate the case as of the time it was initially brought, the judge, in fact, knows a lot more than the lawyer did at that time. She knows the facts and legal rules that were actually presented to the court, and which ones turned out to be dispositive.... This hindsight can affect a judge's view

Id at 78. Research on the well documented "hindsight bias" demonstrates that decision nakers do, in fact, routinely overestimate the predictability of past events. See Barucli Fischhoff, *Hind*-

during trial, litigants face uncertainties about the facts, the governing law, the application of law to fact, the adversary's lawyering skills and presentation of the case, the predilections of the judge with respect to procedural and substantive law, and the biases of the jurors, among others. Because of any or all of these uncertainties, "there is inevitably some probability, however low, that the plaintiff will recover damages." Given that it "seems reasonable to characterize a frivolous suit as an action where both sides know that it is very unlikely that a trial outcome will favor the plaintiff," the Frivolous Framing Theory operationalizes frivolous litigation as low-probability litigation.

B. Proposition #1: Contrasting Risk Attitudes

The Frivolous Framing Theory posits that plaintiffs in frivolous or low-probability litigation, in contrast to plaintiffs in ordinary litigation, are likely to be risk seeking, while defendants in frivolous litigation, in contrast to defendants in ordinary litigation, are likely to be risk averse. Plaintiffs in frivolous suits, in other words, are likely to view litigation options as *low-probability gains*, so they are inclined to prefer trial to an actuarially fair settlement, while defendants in frivolous suits are likely to view litigation options as *low-probability losses*, so they are inclined to prefer an actuarially fair settlement to trial.¹⁰⁶ Ta-

sight [Does Not Equal] Foresight: The Effect of Outcome Knowledge on Judgment Under Uncertainty, 1 J Exp Psych 288 (1975).

¹³ Samuel R. Gross and Kent D. Syverud, Getting To No: A Study of Settlement Negotiations and the Selection of Cases for Trial, 90 Mich L Rev 319, 342 (1991).

14 P'ng, 14 Bell J Econ at 548 (cited in note 30).

18 The Frivolous Framing Theory, like the Framing Theory, assumes that plaintiffs generally view litigation options as gains, and defendants generally view litigation options as losses, "be-

Argue Bebchuk and Howard F. Chang, An Analysis of Fee Shifting Based on the Margin of Victory: On Frivolous Suits, Meritorious Suits, and the Role of Rule 11, 25 J Legal Stud 371, 373 (1996) ("One source of uncertainty is that the court might lack information available to the plaintiff or can err in its judgment given the information that it can observe. Furthermore, the plaintiff might lack information that a trial would later reveal to the court. As a result, the plaintiff might attach some probability to winning even if it views its case as weak, and it might attach some probability to losing even if it views its case as strong."); Yablon, 44 UCLA L Rev at 93 n 71 (cited in note 98) (identifying "vagueness or indeterminacy of legal doctrine, imperfect knowledge of the facts, uncertainty as to the inpact evidence will have on the decisionmaker, and uncertainty as to the identity of the decisionmaker" as sources of uncertainty in low-probability cases); id at 98 (identifying "the particular judge's view of 12(b)(6), or the documents in defendant's files, or how rattled a client will get when deposed" as sources of litigation uncertainty).

[&]quot;"". "Low-probability litigation" is obviously an over-inclusive definition, for it would include civil rights test cases, a category of case that I would not label "frivolous" in ordinary parlance. See, for example, Bone, 145 U Pa L Rev at 531 (cited in note 1) (identifying civil rights test cases as low-probability cases); Polinsky and Rubinfeld, 82 Georgetown L J at 405 n 20 (cited in note 47) ("An example of a low-probability legitimate suit might be a suit filed in good faith that attempts to reverse a long-standing law."). This Article focuses on low-probability cases in which money damages are the centerpiece of the dispute and excludes those cases in which the parties are seeking to vindicate important principles or to modify current law.

ble 3 presents litigants' predicted risk attitudes in frivolous or low-probability litigation.

TABLE 3
RISK ATTITUDES IN FRIVOLOUS OR
LOW-PROBABILITY LITIGATION

	Decision Frame	Risk Attitude	Explanation
Plaintiff	low probability	risk seeking	overweighting of
	gains		probabilities
Defendant	low probability	risk averse	overweighting of
	losses		probabilities

To explore this proposition, I administered two simple litigation problems to first-year students at the University of Missouri School of Law. Consider first the simple litigation problem that I gave to 40 students, approximately half of whom played the role of plaintiff and half the role of defendant. Subjects playing the role of plaintiff in this simple litigation problem received the following information:

Imagine that you are a plaintiff who has sued defendant for \$5,000. Assuming no attorneys' fees or costs, which would you prefer:

- A 1% chance of winning \$5,000 at trial
- A certain \$50 settlement payment from defendant

The defendant-subjects received the corresponding information:

Imagine that you are a defendant whom plaintiff has sued for \$5,000. Assuming no attorneys' fees or costs, which would you prefer:

- A 1% chance of losing \$5,000 at trial
- A certain \$50 settlement payment to plaintiff

In this simple frivolous litigation problem, the plaintiff-subjects faced a choice between two options with identical expected values—a certain \$50 settlement or an expected trial verdict valued at \$50 (1% x

cause people internalize losses and gains relatively quickly." Rachlinski, 70 S Cal L Rev at 129 n 65 (cited in note 16) ("Since the events that led to the litigation sometimes predate the settlement talks by years, parties have probably endowed the gains or losses by the time litigation occurs.").

¹⁰⁷ For a defense of this convention see Korobkin and Guthrie, 93 Mich L Rev at 124-25 (cited in note 16) (explaining the decision to exclude attorneys' fees from between-group decision problems like the one reported here). See also Rachlinski, 70 S Cal L Rev at 136 (cited in note 16) (noting that he did not mention attorney's fees in his key simulation).

 $\$5,000 + 99\% \times \$0 = \$50$). Like the plaintiff-subjects, the defendant-subjects faced a choice between two options with identical expected values—a certain \$50 settlement payment to plaintiff or an expected trial verdict valued at -\$50 (1% x -\$5,000 + 99% x \$0 = -\$50).

Consistent with the Frivolous Framing Theory, I found that 62 percent of the subjects (13 of 21) evaluating the problem from the plaintiff's perspective selected trial, the risk-seeking option. In stark contrast, 84 percent of the subjects (16 of 19) evaluating the problem from the defendant's perspective preferred settlement, the risk-averse option. Despite the relatively small sample size, the difference between plaintiff-subjects and defendant-subjects is highly statistically significant. In this simple frivolous hitigation problem, plaintiffs strongly preferred trial to an actuarially fair settlement offer, while defendants overwhelmingly preferred to pay that settlement offer despite the very low likelihood they would lose at trial.

I gave another group of 74 students a slightly more complicated and factually rich frivolous litigation vignette called "The Contract." In The Contract, subjects playing either the role of plaintiff or the role of defendant are asked to imagine themselves in a breach of contract suit. Both plaintiff-subjects and defendant-subjects learn that plaintiff believes defendant has breached and that the breach has cost plaintiff \$6,000. As a result, plaintiff has sued defendant in municipal court for \$6,000. Both plaintiff and defendant retain attorneys representing

^{\$5,000} at trial" but only *implies* that plaintiff has a corresponding 99 percent chance of winning \$0. That is, the problem does not explicitly define the trial option as "a 1% chance of winning \$5,000 at trial and a 99% chance of winning \$0." In the unlikely event that a subject did *not* infer from the problem a corresponding 99 percent chance of winning \$0—for example, she inferred that she had a 50 percent chance of recovering \$2,500 and a 49 percent chance of recovering \$0—that subject might have chosen the trial option not because of a risk-seeking preference but rather because its expected value exceeded the value of settlement. In the example giveu, for instance, the expected value would be \$1,300 (1% x \$5,000 + 50% x \$2,500 + 49% x \$0 = \$1,300). While I acknowledge this possibility, it seems unlikely to me that subjects would draw this inference from the problem statement. Moreover, this is a fairly conventional means of identifying the uncertain option in a decision problem of this type. See, for example, Rachlinski, 70 S Cal L Rev at 128 (cited in note 16) (identifying the uncertain trial option faced by plaintiff as "a 50% chance of winning a \$400,000 award" rather than "a 50% chance of winning a \$400,000 award and a 50% chance of winning \$0").

[&]quot;p = .004. To test for statistical significance, I performed a two-tailed, Fisher's exact test, which is "[a] procedure for determining the exact probability of obtaining particular frequencies in a 2 x 2 table," rather than an approximation. Barry Cohen, Explaining Psychological Statisties 715 (Brooks/Cole 1996). See also B.S. Everitt, The Analysis of Contingency Tables 14-19 (Chapman & Hall 2d ed 1992) (explaining Fisher's exact test). Where the sample size is small and/or any of the expected cell frequencies is small, as is the case here, the Fisher's exact test, rather than the chi-squared test, should be used. See Everitt, Analysis of Contingency Tables at 14; Michael O. Finkelstein and Bruce Levin, Statistics for Lawyers 164 (Springer-Verlag 1990).

The Contract (unpublished survey performed by author) (on file with author).

them free of charge, and both the plaintiff-subjects and the defendant-subjects learn that their respective attorneys have studied the facts of the case, the governing law, and the judge who will adjudicate the case. Based on this review, the attorneys have informed their respective clients that the judge will award plaintiff either \$6,000 or \$0 "depending upon how the judge interprets the contract." The attorney for each party then predicts that there is a 5 percent chance that the judge will award plaintiff \$6,000. Finally, the plaintiff-subjects learn that the defendant has offered to settle the case for \$300, and the defendant-subjects learn that the plaintiff has agreed to settle the case if the defendant will pay \$300. The subjects are then asked to indicate whether they will settle the case.

In this slightly richer litigation vignette, the plaintiff-subjects faced a choice between two options with identical expected values—a certain \$300 settlement or an expected trial verdict valued at \$300 (5% x \$6,000 + 95% x \$0 = \$300). Like the plaintiff-subjects, the defendant-subjects also faced a choice between two options with identical expected values—a certain \$300 settlement payment to plaintiff or an expected trial verdict valued at -\$300 (5% x -\$6,000 + 95% x \$0 = -\$300).

Consistent with the Frivolous Framing Theory, I again found that a majority of plaintiffs (20 of 38) expressed a preference for trial, the risk-seeking option, and more than two-thirds of defendants (25 of 36) expressed a preference for settlement, the risk-averse option. The difference between plaintiff-subjects and defendant-subjects is marginally statistically significant, providing additional support for this account of frivolous litigation.

[&]quot; See note 107.

¹¹² The Contract (cited in note 110).

¹⁰ p = .06 (two-tailed, Fisher's exact test). For the sake of consistency, I report statistical significance according to the Fisher's exact test. Compare with note 109. Because the sample size and expected cell frequencies are sufficiently large, I could also have performed a chi-squared test, which is "[a] commonly used approximation to Fisher's exact test in large samples." Finkelstein and Levin, *Statistics for Lawyers* at 159 (cited in note 109). Per the chi-squared test, the results are: $\chi^2(1) = 2.85$, p < .10.

The stakes in the two vignettes I report above are admittedly modest, but the stakes in inany real-world cases are also quite modest. See Herbert M. Kritzer, Contingent-Fee Lawyers and Their Clients: Settlement Expectations, Settlement Realities, and Issues of Control in the Lawyer-Client Relationship, 23 L & Soc Inquiry 795, 806–12 (1998) (describing cases involving similar stakes); Herbert M. Kritzer, Contingency fee lawyers as gatekeepers in the civil justice system, 81 Judicature 22, 27 (1997) (reporting that 43 percent of the Wisconsin lawyers in his contingency fee study indicated that they require a median minimum damage figure of \$5,000 in automobile accident cases before they will agree to take them); Donald R. Songer, Tort Reform in South Carolina: The Effect of Empirical Research on Elite Perceptions Concerning Jury Verdicts, 39 SC L Rev 585, 592–93 (1988) (reporting that the median jury verdict for plaintiffs in South Carolina courts during 1985 was \$5,113 overall, \$5,050 in all tort cases, and \$3,156 in products liability cases).

While admittedly only suggestive," this work, coupled with experimental work outside the litigation context, shows that plaintiffs and defendants are likely to exhibit fairly predictable risk patterns in frivolous litigation. Plaintiffs are likely to be psychologically inclined toward risk-seeking behavior, while defendants are likely to be psychologically inclined toward risk-averse behavior.

C. Proposition #2: Advantage Plaintiff

The Frivolous Framing Theory's first proposition—that plaintiffs in frivolous litigation are relatively more risk seeking than defendants—leads directly to its second proposition: Because plaintiffs in frivolous suits have a greater tolerance for risk than the defendants they have sued, the plaintiffs have "psychological leverage" in settlement negotiations, even though they face a very low probability of prevailing at trial. Whether consciously aware of this or not, plaintiffs are likely to "use" this psychological leverage to obtain favorable settlements or to "misuse" it to force a case to bargaining impasse.

1. Plaintiff-friendly settlements.

"Power," according to negotiation scholars Samuel Bacharach and Edward Lawler, "[i]s the [e]ssence of [b]argaining." While litigants may derive bargaining power from a number of sources—including the merits of their cases, 120 the financial resources they possess, 200 and the availability of attractive alternatives to bargaining 121

Experimental work like that reported above may lack "external validity," which "is a measure of how certain we are that a relationship observed in a controlled experiment will also be valid outside of the conditions of that experiment." Robert Thomas Maleske, Foundations for Gathering and Interpreting Behavioral Data: An Introduction to Statistics 150 (Brooks/Cole 1995). See also Korobkin and Guthrie, 93 Mich L Rev at 126–28 (cited in note 16) (addressing external validity in a settlement study). Nevertheless, this experimental approach is the most reliable means of establishing the impact of a particular variable on individual behavior.

[&]quot;See, for example, Part II.C.

[&]quot;In their study of civil litigation in California, Samuel Gross and Kent Syverud found that defendants refused to make any settlement offers at all in 26.3 percent of cases sampled, suggesting defendant risk seeking rather than defendant risk aversion. See Gross and Syverud, 90 Mich L Rev at 343 (cited in note 103). At first glance, this finding might appear to contradict the Frivolous Framing Theory's prediction regarding defendant risk aversion in frivolous litigation. However, there is no evidence to suggest that these "zero offer cases" were frivolous or low-probability cases. Indeed, the fact that plaintiffs prevailed at trial in 40 percent of the cases suggests (though it certainly does not prove) that they were not frivolous or low-probability cases. Id at 346.

[&]quot;Samuel B. Bacharach and Edward J. Lawler, Bargaining: Power, Tactics, and Outcomes 43 (Jossey-Bass 1981).

[&]quot;See Robert H. Mnookin and Lewis Kornhauser, *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 Yale L J 950, 968 (1979) (noting that "the outcome that the law will impose if no agreement is reached gives each [party] certain bargaining chips").

[&]quot;See Kritzer, Let's Make a Deal at 73 (cited in note 2) (identifying "the ability to impose

one of the most potent sources of power a litigant can possess is a greater tolerance for risk than his adversary. "If there is a disparity in risk preference," Herbert Kritzer explains, "the player with the lower aversion to risk can use that as an advantage over the other player, and thus can be said to have a degree of power."

Plaintiffs in frivolous litigation are likely to be more risk seeking than the defendants they have sued, so plaintiffs in frivolous litigation are likely to have more power in bargaining. Plaintiffs, in short, find trial more attractive, so they will demand more than the expected value of their claim to settle. Defendants, who find trial less attractive, are also likely to offer more than the expected value of the claim to settle. Assuming that defendant's inflated offer exceeds the plaintiff's inflated demand, the parties to a frivolous suit are likely to settle for an amount greater than the expected value of the claim, thereby benefiting the plaintiff.

Recall, for example, the vignette described above in which plaintiff sued defendant for breach of contract. There, the attorneys predicted to their respective clients that the plaintiff has a 5 percent chance of winning \$6,000 at trial. Suppose that the risk-seeking plaintiff is willing to settle for a minimum of \$500 and that the risk-averse defendant is willing to pay up to \$1,000 to settle. Because defendant's maximum offer (\$1000) exceeds plaintiff's minimum demand (\$500), plaintiff and defendant are likely to settle the case for some amount between \$500 and \$1,000, approximately two-to-three times the expected value of plaintiff's claim ($5\% \times \$6,000 + 95\% \times \$0 = \$300$ expected value to plaintiff). The plaintiff, in other words, is likely to obtain an advantageous settlement due to his greater tolerance for risk.

In short, "[i]n any negotiated outcome, a risk preferer will have an advantage over the party who is risk-averse." This means that

costs on the other party through legal procedures that are a part of litigation" and "the parties' capacities for absorbing costs that can be imposed" as two of the "key elements of power" in litigation bargaining).

Without Giving In 102 (Houghton Mifflin 2d ed 1991) (claiming that "the relative negotiating power of two parties depends primarily upon how attractive to each is the option of not reaching agreement"). In a separate article, Roger Fisher identified five additional categories of power in negotiation: (1) skill and knowledge, (2) a good relationship, (3) an elegant solution, (4) legitimacy, and (5) commitment. See Roger Fisher, Negotiating Power: Getting and Using Influence, 27 Am Beh Sci 149, 153 (1983). See also G. Richard Shell, Bargaining for Advantage: Negotiation Strategies for Reasonable People 101–05 (Viking 1999) (identifying positive, negative, and normative "leverage" or power in negotiation); Charles B. Craver, Effective Legal Negotiation and Settlement 124–44 (Michie 2d ed 1993) (identifying thirteen "common power bargaining techniques").

Kritzer, Let's Make a Deal at 76 (cited in note 2).

See text accompanying notes 110–114.

Mnookin and Kornhauser, 88 Yale L J at 977 (cited in note 119). See also Kritzer, Let's Make a Deal at 75 (cited in note 2) ("[If one party is risk averse and the other is risk neutral, the

plaintiffs in frivolous or low-probability litigation, in contrast to plaintiffs in ordinary litigation, should consistently enjoy a psychological edge when bargaining with defendants.

2. Bargaining breakdown.

Plaintiffs' greater tolerance for risk in frivolous litigation may enable them to recover advantageous settlements, but plaintiffs' risk seeking may also undermine settlement efforts if it exceeds defendants' aversion to risk. If, in other words, a risk-seeking plaintiff's inflated minimum demand exceeds a risk-averse defendant's inflated maximum offer, the parties will reach bargaining impasse. Suppose that the plaintiff in The Contract vignette described above is more risk seeking than we imagined before, demanding \$1,500 to settle the \$6,000 claim, while the defendant is equally risk averse, offering as much as \$1,000 to settle the claim. Under these hypothetical facts, plaintiff's minimum demand (\$1,500) will exceed defendant's maximum offer (\$1,000) by \$500, so the parties are unlikely to settle the suit.

Cynthia Fobian and Jay J.J. Christensen-Szalanski found evidence of this phenomenon in an elaborate study designed to assess the impact of ambiguity on settlement. Fobian and Christensen-Szalanski randomly assigned subjects to play the role of a plaintiff-patient or defendant-doctor in eight scenarios based on actual medical malpractice cases. Subjects received a one-page summary of each case, including details about the injury the plaintiff suffered, the plaintiff's version of the facts, and the defendant's version of the facts. After reading this information, the subjects received a prediction from their lawyer about "the amount of money that would be awarded if the plaintiff won the case in a court trial, and the probability of the plaintiff winning the case." In the experimental conditions most relevant to this Article, the subjects learned that their lawyer has "extreme confidence" in his prediction that plaintiff has a low probability (10 percent) of prevailing at trial.

risk-neutral party should be able to exploit that difference to its own advantage.").

¹⁵ Compare Max H. Bazerman, Negotiator Judgment: A Critical Look at the Rationality Assumption, 27 Am Beh Sci 211, 212–15 (1983) (reporting studies showing generally that risk-averse parties were more concessionary and more likely to reach deals than risk-seeking parties).

ties).

See Cynthia S. Fobian and Jay J.J. Christensen-Szalanski, Ambiguity and Liability Negotiations: The Effects of the Negotiators' Role and the Sensitivity Zone, 54 Organizational Beh & Human Decision Processes 277, 280 (1993).

Id at 284

Id. For a sample case, see id at Appendix 296-97 (providing copy of vignette based on Gillette v Tucker, 67 Ohio St 106, 65 NE 865 (1902)).

¹³ Id at 284.

Armed with the facts of the dispute and the lawyer's prediction regarding the likely outcome, the plaintiff-subjects were asked to indicate the *minimum* amount of money they would accept to settle, and the defendant-subjects were asked to indicate the *maximum* amount of money they would pay to settle, in both low-damage and high-damage cases.¹⁵⁰

In the low-probability, low-damage cases, the plaintiff-subjects and defendant-subjects learned that the plaintiff has a 10 percent chance of winning \$100,000 at trial. Thus, the plaintiffs faced an expected trial verdict of \$10,000 (10% x \$100,000 + 90% x \$0 = \$10,000), while the defendants faced an expected trial verdict of -\$10,000 (10% x -\$100,000 + 90% x \$0 = -\$10,000). Given these expectations, a risk-neutral plaintiff would accept \$10,000 to settle, and a risk-neutral defendant would agree to pay \$10,000 to settle.

In fact, however, the plaintiff-subjects demanded, on average, \$53,000. Plaintiffs in this low-probability litigation, in other words, exhibited risk-seeking behavior, demanding more than five times the expected value of trial to settle the case. Defendant-subjects, by contrast, expressed a willingness to pay, on average, \$16,000. Defendants, in other words, exhibited risk-averse behavior, offering 60 percent more than the expected value of trial to settle the case, even though they were likely to win at trial nine times out of ten. Assuming that plaintiffs continue to demand \$53,000 to settle, and defendants refuse to offer more than \$16,000 to settle, plaintiffs and defendants are unlikely to reach agreement because of the \$37,000 that separates them.

The researchers obtained similar results in frivolous or low-probability cases involving high damages. In the low-probability, high-damages cases, plaintiff-subjects and defendant-subjects learn that the plaintiff has a 10 percent chance of winning \$1 million at trial. The plaintiffs in this condition thus faced an expected trial verdict of

list Id. Fobian and Christensen-Szalanski, in other words, asked subjects to provide a figure slightly higher than their "certainty equivalent." A certainty equivalent is "the amount of money for which a person is indifferent between receiving that amount of money for certain or playing the gamble." Gonzalez and Wu, 38 Cognitive Psych at 133 (cited in note 67). For a general discussion, see John C. Hershey and Paul J.H. Schoemaker, *Probability versus Certainty Equivalence Methods in Utility Measurement: Are They Equivalent?*, 31 Mgmt Sci 1213 (1985).

¹¹ Fobian and Christensen-Szalanski, 54 Organizational Belı & Human Decision Processes at 286 (cited in note 126).

¹³² Id at 285. When the researchers introduced ambiguity into these low-probability, low-damages cases by indicating that the attorney for each party lad "little confidence," rather than "extreme confidence," in his prediction that plaintiff had a 10 percent chance of winning \$100,000 at trial, the plaintiff-subjects' settlement demands remained unchanged. Id at 286. The insertion of ambiguity into the situation did have an effect on defendant-subjects, however. Defendant-subjects exhibited twice as much risk aversion when the predicted outcome appeared ambiguous, indicating a willingness to pay as much as \$32,000, on average, to settle the case. Id at 285.

\$100,000 (10% x \$1,000,000 + 90% x \$0 = \$100,000), while the defendants faced an expected trial verdict of -\$100,000 (10% x -\$1,000,000 + 90% x \$0 = -\$100,000). Given this expectation, a risk-neutral plaintiff would agree to settle for \$100,000, and a risk-neutral defendant would agree to pay \$100,000 to settle.

In fact, however, plaintiffs demanded, on average, \$360,000.¹³³ In this low-probability litigation, in other words, plaintiffs again exhibited risk-seeking behavior, demanding nearly four times the expected value of trial to settle the case. Defendants, by contrast, exhibited slight risk aversion, expressing a willingness to pay \$1,000 more than the expected value of the claim, \$101,000.¹³⁴ Assuming plaintiffs continue to demand \$360,000 to settle, and defendants refuse to offer more than \$101,000 to settle, plaintiffs and defendants are unlikely to reach agreement because of the \$259,000 that separates them.¹³⁵

Bargaining impasse appears likely to result in these low-probability cases because plaintiffs' risk-seeking demands exceeded defendants' risk-averse offers. Indeed, plaintiffs exhibited extreme risk-seeking behavior in these cases, demanding four-to-five times their expected value to settle. Explaining plaintiffs' apparent taste for risk in frivolous or low-probability litigation is the subject of the next part of the Article.

IV. EXPLORING WHY PLAINTIFFS SEEK RISK IN FRIVOLOUS LITIGATION

The Frivolous Framing Theory's observation that *plaintiffs* in frivolous litigation are risk seeking is surprising because scholars generally assume that litigants are risk averse. Indeed, Samuel Gross

¹³³ Id at 286.

damages cases by indicating that the attorney for each party had "little confidence," rather than "extreme confidence," in his prediction that plaintiff lad a 10 percent chance of winning \$1 million at trial, the plaintiff-subjects' settlement demands remained virtually unchanged, as the amount plaintiffs were willing to accept to settle dropped from \$360,000 to \$352,000. Id at 286. The insertion of ambiguity into the situation again had a much more pronounced affect on defendant-subjects. The defendant-subjects exhibited more than twice as much risk aversion when the predicted outcome appeared ambiguous, offering to pay as much as \$220,000, on average, to settle the case. Id at 285.

¹³ While subjects responding to Fobian and Christensen-Szalanski's low-probability cases behaved consistent with the Frivolous Framing Theory, subjects responding to high-probability cases administered by the researchers behaved consistently with the Framing Theory. See id at 286.

^{286.}See note 25. Scholars tend to assume that risk-seeking behavior is unstable and senseless. See, for example, Rachlinski, 70 S Cal L Rev at 122 (cited in note 16) ("Why would anyone make a risk-seeking decision in litigation? Absent a penchant for risk (which could be satisfied easily and at less cost by taking a trip to Las Vegas), risk-seeking choices make no sense."); McCaffery, 1994 Wis L Rev at 73 (cited in note 63) (noting that risk-seeking behavior "is an inherently unstable state that we would not desire to flourish"). But see Donald P. Judges, Of Rocks and Hard

and Kent Syverud hypothesize that plaintiffs in low-probability litigation are particularly prone to risk aversion, contending that "plaintiffs will [generally] accept offers that are well below their estimates of the expected value of the judgment at trial" and that "[t]hey are most likely to do so in cases with low probabilities of success at trial."

According to the Frivolous Framing Theory, plaintiffs make risk-seeking decisions because the decision frame in frivolous litigation induces them to overweight their low-probability chances of prevailing at trial. But why do plaintiffs overweight low-probability prospects? Unfortunately, the "conditions under which low probabilities are overweighted . . . are not spelled out in [prospect] theory." Nevertheless, I attempt to identify below four potential explanations of plaintiffs' risk-seeking behavior in frivolous litigation: a psychophysical explanation, a motivational or emotional explanation, a cognitive explanation, and a "rational" explanation.

A. Explanation #1: Psychophysical

Psychophysical explanations posit that "the same psychological properties that underlie the perception of physical stimuli also underlie the evaluation of monetary outcomes." The particular psychophysical phenomenon that accounts for the overweighting of low-probability risks, according to Kahneman and Tversky, is a "category-boundary effect" known as the principle of "diminishing sensitivity."

The principle of diminishing sensitivity refers to the phenomenon that changes at the endpoints of a scale are more meaningful than changes closer to the middle. ¹⁴¹ Consider an example from the physical

Places: The Value of Risk Choice, 42 Emory L J 1, 3-5 (1993) (arguing that tort law should protect individuals' risk-seeking behavior as an important component of individual autonomy).

Gross and Syverud, 90 Mich L Rev at 352 (cited in note 103).

See notes 62–63 and 71–74 and accompanying text.

Colin F. Camerer and Howard Kunreuther, Decision Processes for Low Probability Events: Policy Implications, 8 J Pol Analysis & Mgmt 565, 572 (1989). See also Gonzalez and Wu, 38 Cogmitive Psych at 136 (cited in note 67) (noting that there has been little progress in establishing a psychological foundation for the weighting function).

¹⁶ Richard P. Larrick, *Motivational Factors in Decision Theories: The Role of Self-Protection*, 113 Psych Bull 440, 441–42 (1993) (noting that prospect theory, as well as cardinal utility theory, proposes "that a single, hardwired mechanism guides the decisions of all people"). See also Gonzalez and Wu, 38 Cognitive Psych at 129 (cited in note 67) ("The perception of probability has a psychophysics all its own.").

[&]quot;See, for example, Tversky and Kahnenan, 5 J Risk & Uncertainty at 303 (cited in note 11) ("Diminishing sensitivity entails that the impact of a given change in probability diminishes with its distance from the boundary. For example, an increase of .1 in the probability of winning a given prize has more impact when it changes the probability of winning from .9 to 1.0 or from 0 to .1, than when it changes the probability of winning from .3 to .4 or from .6 to .7."); Kahnenan and Tversky, 39 Am Psych at 344 (cited in note 11) (explaining that a category-boundary effect arises in that "[a] change from impossibility to possibility or from possibility to certainty has a bigger impact than a comparable change in the middle of the scale"); Kahnenan and Tversky,

world. Imagine that you are seated in a room with an overhead light that can be set anywhere from zero (off) to six (brightest). Due to diminishing sensitivity, changes in settings at the endpoints, for example, zero-to-one, are likely to appear more prominent or noticeable than changes in settings located at the middle, such as three-to-four. In other words, a slight increase in lighting will seem more pronounced when you are sitting in the dark than when you are sitting in a moderately lit room.

Similarly, in assessing probabilistic outcomes, changes at the ends of the scale are likely to looin larger than changes in the middle. Suppose, for example, that you have a lottery ticket with an uncertain prospect of winning. "Intuition suggests that the value of the ticket is not a linear function of the probability of winning" but rather that "an increase from 0% to 5% appears to have a larger effect than an increase from 30% to 35%," even though each increase is equal to five percentage points. Similarly, "[i]f men have a 2% chance of contracting a particular disease and women have a 1% chance, we perceive the risk for men as twice the risk for women. However, the same difference of 1% appears less dramatic when the chance of contracting the disease is near the middle of the probability scale, e.g., a 33% chance for men and a 32% chance for women may be perceived as a trivial sex difference."144 In short, "[a] change from impossibility to possibility or from possibility to certainty has a bigger impact than a comparable change in the middle of the scale." Because of diminishing sensitivity, decisionmakers are likely to overweight low probabilities and underweight moderate-to-high probabilities.146

While this psychophysical explanation is compelling, it is lacking in two regards. First, the psychophysical explanation accounts for why decisionmakers might overweight low probabilities *relative to* moder-

²⁴⁶ Scientific Am at 164 (cited in note 11) (explaining that "the difference between certainty and possibility and the difference between possibility and impossibility loom larger than comparable differences in the intermediate range of probability"). See also Gonzalez and Wu, 38 Cognitive Psych at 136 (cited in note 67) ("Under the principle of diminishing sensitivity, increments near the end points of the probability scale loom larger than increments near the middle of the scale.").

¹⁶ For another example, see Lopes, 20 Advances Experimental Soc Psych at 260-61 (cited in note 10) ("This is the same sort of thing that happens in the 'categorical perception' of human speech. Sounds that actually change in equal acoustic increments from an ideal 'ba' to an ideal 'da' are perceived to shift abruptly from sounding like clear ba's to sounding like clear da's.") (internal citation omitted).

[&]quot;Kahneman and Tversky, 39 Am Psych at 344 (cited in note 11). See also Kahneman and Tversky, 246 Scientific Am at 164 (cited in note 11) ("[T]he difference between certainty and possibility and the difference between possibility and impossibility loom larger than comparable differences in the intermediate range of probability.").

Gonzalez and Wu, 38 Cognitive Psych at 129-30 (cited in note 67).

Kalıneman and Tversky, 39 Am Psych at 344 (cited in note 11).

¹⁴ Id at 345.

ate-to-high probabilities—it explains, in other words, why changes at the low end of the scale are more noticeable than changes at the middle of the scale—but it does not explain why it leads to overweighting, rather than merely less underweighting, at the low end of the scale. Second, as psychologist Richard Larrick explains, the psychophysical explanation is limited in that it "does not consider the possibility that people might have affective responses to risk itself." Indeed, feelings and motivations may provide another explanation for plaintiffs' treatment of risk in frivolous litigation.

B. Explanation #2: Motivational

Motivational explanations draw not only upon individuals' perceptions of probabilities, but also upon individuals' emotions, to explain risky decisionmaking. "The motivational approach assumes," in other words, "that people are not just concerned with the objective consequences of decisions but also with the affective consequences of decisions and the motivational states that ameliorate or intensify them." While full consideration of all the motivational forces that might explain a plaintiff's risk-seeking behavior in frivolous litigation is beyond the scope of this paper, three motivational forces seein particularly likely to account for that behavior: hope, elation, and rejoicing.

1. Hope > Fear.

The first emotion that might help explain plaintiffs' tendencies to overweight their low-probability prospects of winning at trial is hope. When the plaintiff in a frivolous or low-probability suit faces a choice between a \$500 settlement offer and a long-shot chance at recovering \$20,000 at trial, she makes a decision not only about the dollar amounts involved, but also about whether she is going to hold onto

the psychophysical explanation] provides an incomplete account of the weighting function. Even though the concept can explain the curvature of the weighting function, it cannot account for the level of absolute weights." Gonzalez and Wu, 38 Cognitive Psych at 138 (cited in note 67). In other words, the psychophysical account provided by Tversky and Kahneman "is silent about underweighting or overweighting relative to the objective probability." Id (internal parenthetical omitted). Gonzalez and Wu attempt to enrich the psychophysical explanation by proposing that overweighting of low probabilities is a product not only of diminishing sensitivity, but also "attractiveness," which they define as the idea that "one person finds betting on the chance domain more attractive than the second person." Gonzalez and Wu, 38 Cognitive Psych at 138.

Larrick, 113 Psych Bull at 442 (cited in note 140).

¹⁶ Id at 445. See also id at 443-44 (noting that the motivational explanation assumes "people respond to the emotional consequences of making a decision that come from self-awareness and a sense of agency: feelings of success and failure, elation and disappointment, efficacy and impotence, rejoicing and regret").

hope (i.e., the prospect of recovering the full \$20,000 at trial) or yield to fear (i.e., the prospect of recovering nothing at trial). In frivolous litigation, in contrast to ordinary litigation, the settlement amount is generally so small relative to what may be available at trial that plaintiffs may be more likely to hold on to hope than to give in to fear when deciding whether to settle or try their cases.

2. Elation > Disappointment.

The second emotion that might help explain plaintiffs' risk-seeking behavior in frivolous litigation is elation. According to David Bell's "disappointment theory," decisionmakers seek to maximize elation and minimize disappointment when making decisions. Elation, for Bell, refers to "the euphoria associated with an outcome that exceeds expectations." Disappointment, by contrast, "is a psychological reaction to an outcome that does not match up to expectations."

Disappointment theory posits that an individual is likely to feel more elation upon winning a gamble she did not expect to win than upon winning a gamble she expected to win. A decisionmaker, in other words, will feel more elated after winning a \$10,000 prize if she had a 10 percent chance of winning than if she had a 90 percent chance of winning. Conversely, disappointment theory posits that an individual's disappointment upon losing a gamble is likely to be greater the higher the probability of winning. A decisionmaker, in other words, will feel more disappointment after losing a gamble that she had a 90 percent chance of winning than after losing a gamble she had only a 10 percent chance of winning. Because decisionmakers are aware of this beforehand, they take it into account when making risky decisions.

¹⁵⁰ Consider Jennifer Gerarda Brown, *The Role of Hope in Negotiation*, 44 UCLA L Rev 1661 (1997) (explaining how two different conceptions of "hope" can influence negotiation behavior); Lopes, 20 Advances Experimental Soc Psych at 264–92 (cited in note 10) (proposing a motivational theory of risky decisionmaking premised on hope or fear).

¹⁵¹ See David E. Bell, *Disappointment in Decision Making Under Uncertainty*, 33 Operations Research 1 (1985).

¹⁵² Id at 1.

in Id

¹⁵⁴ Id at 5, 9–10. But see Wilco W. van Dijk and Joop van der Pligt, *The Impact of Probability and Magnitude of Outcome on Disappointment and Elation*, 69 Organizational Beh & Human Decision Processes 277, 280, 282–83 (1997) (finding in an experimental study that the probability of obtaining a desired outcome did not have a statistically significant impact on subjects' reported feelings of elation).

¹⁵ See Bell, 33 Operations Research at 5, 9 (cited in note 151) (suggesting that disappointment may be directly related to the likelihood of the outcome). See also van Dijk and van der Pligt, 69 Organizational Beh & Human Decision Processes at 279–83 (cited in note 154) (finding experimental support for this proposition).

¹⁸ See Bell, 33 Operations Research at 1–2 (cited in note 151) (arguing that decisionmakers anticipate greater disappointment when results do not match their expectations and may con-

Consider the implications for plaintiffs making litigation decisions. Suppose that a plaintiff in ordinary litigation faces a 75 percent chance of winning \$20,000 at trial, while a plaintiff in frivolous litigation faces a 5 percent chance of winning \$20,000 at trial. The plaintiff in ordinary litigation knows she will feel mild elation if she wins at trial but severe disappointment if she loses at trial, so she is likely to exhibit risk aversion and accept a settlement offer below the expected value of trial. The plaintiff in frivolous litigation, by contrast, knows slie will feel extreme elation if slie wins at trial and only minor disappointment if she loses, so she is much more likely to exhibit riskseeking behavior and reject settlement offers unless they are well above the expected value of trial. In short, because the prospect of elation is highest (and the prospect of disappointment lowest) when the plaintiff's probability of prevailing at trial is lowest, plaintiffs in frivolous litigation are more likely than plaintiffs in ordinary litigation to opt for trial as a way to maximize elation.157

3. Rejoicing > Regret.

The third emotion that might help explain plaintiff risk-seeking behavior in frivolous litigation is what decision theorists call "rejoicing." According to proponents of "regret theory," decisionmakers seek to maximize feelings of rejoicing and minimize feelings of re-

sider this in evaluating risky choices).

¹⁹⁷ For additional work on disappointment in decisionmaking, see J. Jeffrey Inmau, James S. Dyer, and Jianmin Jia, A Generalized Utility Model of Disappointment and Regret Effects on Post-Choice Valuation, 16 Marketing Sci 97 (1997) (presenting a model of post-choice valuation incorporating disappointment and regret); Faruk Gul, A Theory of Disappointment Aversion, 59 Econometrica 667 (1991) (using a model to show that risk aversiou implies disappointment aversiou); Graham Loomes, Further Evidence of the Impact of Regret and Disappointment in Choice under Uncertainty, 55 Economica 47 (1988) (studying the relative impact of regret and disappointment on individual choice under uncertainty); Graham Loomes and Robert Sugden, Disappointment and Dynamic Consistency in Choice under Uncertainty, 53 Rev Econ Stud 271 (1986) (using a disappointment-elation function to predict behavior that violates conventional expected utility theories). See also Marcel Zeelenberg, et al, The Experience of Regret and Disappointment, 12 Cognition & Emotion 221 (1998) (studying the difference between regret and disappointment).

¹⁸ See, for example, Robert Sugden, Regret, Recrimination and Rationality, 19 Theory & Decision 77, 77 (1985) (defining rejoicing as the "pleasurable sensation" a decisionmaker experiences upon learning that her chosen alternative turned out better than the rejected alternative); Graham Loomes and Robert Sugden, Regret Theory: An Alternative Theory of Rational Choice under Uncertainty, 92 Econ J 805, 809 (1982) (describing a "regret-rejoice function").

Robert Sugden. See David E. Bell, Regret in Decision Making under Uncertainty, 30 Operations Research 961 (1982) (formulating a utility function that explicitly incorporates regret); Loomes and Sugden, 92 Econ J at 805 (cited in note 158) (developing regret theory as an alternative to Kahneman and Tversky's prospect theory of decisionmaking). For an application of modern regret theory to the civil justice system, see Chris Guthrie, Better Settle Than Sorry: The Regret Aversion Theory of Litigation Behavior, 1999 U III L Rev 43.

gret. Regret theory posits that after making a decision, decisionmakers compare what they obtained to what they could have obtained if they had decided differently. If the choice they made turned out better than the alternative, they experience feelings of rejoicing, but if a different choice would have led to a better outcome, they feel regret. Because decisionmakers are aware of this beforehand, they factor it into their decisionmaking and seek to maximize rejoicing and minimize regret. See the control of the

The magnitude of rejoicing or regret a decisionmaker feels depends upon the difference between the outcome of the option selected and the outcome of the option rejected. A plaintiff who wins \$10,000 at trial will experience more rejoicing if he rejected a \$500 settlement offer than if he rejected a \$5,000 settlement offer. By contrast, a plaintiff who recovers \$0 at trial will experience less regret if he rejected a \$500 settlement offer than if he rejected a \$5,000 settlement offer. Thus, plaintiffs in frivolous litigation generally face the prospect of much greater rejoicing and much less regret than plaintiffs in ordinary litigation because of the likely differences between trial and settlement.

For plaintiffs in frivolous litigation, in short, the prospect of liope, elation, and rejoicing looms large, while the threat of fear, disappointment, and regret fades into the background. The salience of these more positive motivational or emotional forces may explain plaintiffs' unexpected risk-seeking behavior in frivolous suits.

¹⁶⁰ See, for example, Bell, 30 Operations Research at 963 (cited in note 159) (arguing that decisionmakers make tradeoffs between regret and the value of assets in making risky choices); Loomes and Sugden, 92 Econ J at 809 (cited in note 158) (using the theory "that [an] individual chooses between actions so as to maximise the mathematical expectation of modified utility [which includes regret and rejoice factors]").

[&]quot;See Richard P. Larrick and Terry L. Boles, Avoiding Regret in Decisions with Feedback: A Negotiation Example, 63 Organizational Beh & Hnman Decision Processes 87 (1995) (arguing that people make ex post comparisons between what they received and what they could have received had they chosen differently); Sugden, 19 Theory & Decision at 77 (cited in note 158) (contending that once the uncertainty is resolved, decisionmakers compare "what is" with "what might have been").

Larrick and Boles, 63 Organizational Beh & Human Decision Processes at 87 (cited in note 161); Sugden, 19 Theory & Decision at 77 (cited in note 158).

¹⁶ Larrick and Boles, 63 Organizational Beh & Hnman Decision Processes at 87 (cited in note 161); Loomes and Sugden, 92 Econ J at 820 (cited in note 158); Sugden, 19 Theory & Decision at 77–78 (cited in note 158).

¹⁶ See Bell, 30 Operations Research at 963 (cited in note 159) (measuring regret "as the difference between the assets actually received and the highest level of assets produced by *other* alternatives").

¹⁶ See, for example, Guthrie, 1999 U III L Rev at 72–73 (cited in note 159) (arguing that both plaintiffs and defendants are likely to prefer settlement to trial in ordinary litigation as a way to minimize feelings of post-decision regret).

For additional work on regret in decisionmaking, see id at 62–73.

C. Explanation #3: Cognitive

Cognitive explanations posit that plaintiffs' risk-seeking behavior in frivolous litigation is a product of ingrained mental heuristics, inferential tools, or intuitive strategies. [W]hen faced with the difficult task of judging probability or frequency," Kahnenian and Tversky explain, "people eniploy a limited number of heuristics which reduce these judgments to simpler ones." One cognitive heuristic that people use to simplify the process of judgment and decisionmaking is the "sahence" or "vividness heuristic."

According to the salience or vividness heuristic, decisionmakers are "much more influenced by vivid, concrete information than by pallid and abstract propositions of substantially greater probative and evidential value." While reliance on salient or vivid information may sometimes aid decisionmaking, the problem with its use is that the "vividness of information is correlated only modestly, at best, with its evidential value." Indeed, "vivid information is often misleading, particularly when duller but more probative information is cast aside in its favor."

In one study, for instance, researchers gave a group of subjects vivid information about one long-term welfare family and gave another group statistical information painting a more accurate and favorable picture of welfare families.¹⁷⁴ The researchers found that the more accurate statistical information "had no effect on subjects' opinions about welfare recipients," but the vivid description of one

[&]quot; See Richard Nisbett and Lee Ross, Human Inference: Strategies and Shortcomings of Social Judgment 3-8 (Prentice-Hall 1980).

¹⁶⁸ Amos Tversky and Daniel Kahneman, Availability: A heuristic for judging frequency and probability, in Daniel Kahneman, Paul Slovic, and Amos Tversky, eds, Judgment Under Uncertainty: Heuristics and Biascs 163 (Cambridge 1982).

L Rev 683, 706 (1999) (contrasting the salience or vividness heuristic with the closely-related availability heuristic); Shelley E. Taylor, *The availability bias in social perception and interaction*, in Kahnenian, Slovic, and Tversky, eds, *Judgment Under Uncertainty* at 190, 192–94 (cited in note 168) (noting generally that cognitive factors appear to produce salience biases that affect judgment); Nisbett and Ross, *Human Inference* at 8 (cited in note 167) (contending that "people effectively assign inferential weight to physical and social data in proportion to the data's salience and vividness").

¹⁷⁰ Nisbett and Ross, *Human Inference* at 44 (cited in note 167). See also Kuran and Sunstein, 51 Stan L Rev at 706 (cited in note 169) (noting the phenomenon that "salient or vivid information makes a far greater impression than dry or statistical information"); Taylor, *Availability Bias* at 192 (cited in note 169) ("Salience biases refer to the fact that colorful, dynamic, or other distinctive stimuli disproportionately eugage attention and accordingly disproportionately affect judgments.").

¹⁷¹ See, for example, Nisbett and Ross, *Human Inference* at 59–60 (cited in note 167) (identifying some ways in which reliance on salient or vivid information can be helpful).

² Id at 60.

[&]quot; Id.

See id at 57–58 (reporting an experiment conducted by Hamill, Wilson, and Nisbett).

welfare family prompted those exposed to it to develop less favorable attitudes toward welfare recipients. In another study, researchers gave one group of college students statistical data—"mean course evaluations" of psychology courses—and another group more vivid or salient data—a comparable evaluation of psychology courses delivered face-to-face by students who had taken the courses. The researchers found that the "[f]avorable base rate information did not significantly increase course selection and unfavorable base rate information did not significantly decrease course selection," but "subjects exposed to face-to-face comments were highly influenced."

In short, "[p]eople give inferential weight to information in proportion to its vividness." This means that "highly probative but pallid information sometimes will be ignored, and conversely, evidentially weak but vivid information sometimes will have an undue impact on inferences."

Plaintiffs in frivolous litigation may fall prey to this salience or vividness bias when weighting their likelihood of prevailing at trial. Plaintiffs are much more likely to recall reported instances of large trial verdicts in apparently frivolous suits than other data about the civil justice system for the simple reason that information about the former is much more likely to be accessible and vivid than information about the latter.

Daniel Bailis and Robert MacCoun, for instance, performed a content analysis of news magazine articles published from 1980 to 1990 on tort hitigation and found that the articles "exaggerate the proportion of disputes that result in trials," overrepresent plaintiff victories relative to their true rate," and publicize jury awards that, on average, are four to thirty-four times the average jury awards. Similarly, Oscar Chase compared personal injury awards reported in the *New York Times* and *New York Newsday* to average awards obtained in New York courts. Like Bailis and MacCoun, he found that

[&]quot; Id

[&]quot;See Eugene Borgida and Richard E. Nisbett, *The Differential Impact of Abstract vs. Concrete Information on Decisions*, 7 J Applied Soc Psych 258 (1977).

[&]quot; Id at 266.

Nisbett and Ross, Human Inference at 62 (cited in note 167).

[™] Id.

your guide, 80 Judicature 64 (1996) (examining 249 articles from popular magazines for coverage of tort litigation). See also Daniel S. Bailis and Robert J. MacCoun, Estimating Liability Risks with the Media as Your Guide: A Content Analysis of Media Coverage of Tort Litigation, 20 L & Human Beh 419 (1996) (providing a more detailed analysis of the same study).

[&]quot; Bailis and MacCoun, 80 Judicature at 66 (cited in note 180).

т Id.

in Id at 66-67.

¹⁴ See Oscar G. Chase, Helping Jurors Determine Pain and Suffering Awards, 23 Hofstra L

the media reports vastly misrepresented the likely awards at trial. In 1991, for instance, the *Times* and *Newsday* reported court awards averaging \$12.8 and \$9.2 million, respectively, to yet plaintiffs actually recovered average awards of only \$851,128.

Comparing media accounts to accurate court data thus demonstrates that the media exaggerates awards available at trial to plaintiffs. For media accounts to influence plaintiff decisionmaking, however, plaintiffs must actually read or hear about it, and there is some evidence that they do. In his recent study of Wisconsin lawyers, for instance, Kritzer found that clients obtain information about prospective cases in three primary ways, two of which are "news reports that are wildly biased toward the largest cases" and "word of mouth from their social circle (which is likely to also be based largely on the biased media reports)." Kritzer reported anecdotal evidence of prospective clients bringing such news articles and accounts to their attorneys as evidence of the worth of their cases.

While this evidence is admittedly anecdotal, it provides some support for the proposition that plaintiffs are likely to recall the widely available, wildly distorted, and vivid information about big-win lawsuits. Frivolous-sounding cases—like the infamous McDonald's coffee case ¹⁹⁰—seem especially likely to linger in prospective plaintiffs' minds. Because of the availability of vivid or sahent information about big verdicts in frivolous-sounding suits, plaintiffs are likely to overweight their probabilities of success in frivolous litigation. Indeed, scholars have attributed overweighting of low-probability prospects in general to this phenomenon.

Rev 763 (1995).

[&]quot; Id at 772-73.

is Id at 772.

[&]quot; Id at 773.

[&]quot;Kritzer, 23 L & Soc Inquiry at 801 (cited in note 114) (internal parenthetical omitted).

One lawyer reported that, "some clients bring in clippings of somebody who was malpracticed upon' and won a large jury verdict" to illustrate what they expect to receive at trial. Id at 803. Another lawyer reported that "it is amazing how many clients come in and say that they are not trying to get rich off this case, but think they should get \$100,000 for a whiplash or a slip and fall." Id. Yet another attorney "described the situation of a woman with some questionable soft tissue injuries who insisted that her case was worth \$700,000." Id.

Despite sounding like a frivolous case, the McDonald's coffee case, Liebeck v McDonald's Restaurants, 1995 WL 360309 (D NM 1994), was not frivolous by any definition. See Samuel R. Gross and Kent D. Syverud, Don't Try: Civil Jury Verdicts in a System Geared to Settlement, 44 UCLA L Rev 1, 4-5 (1996).

[&]quot;See, for example, McCaffery, 1994 Wis L Rev at 83-84 (cited in note 63) (noting that prospect theory "holds that people systematically (or at least often) overweigh the possibility of events having a small likelihood of occurring, especially where such events seem 'available' or obtain 'prominence' by virtue of widespread publicity"); Camerer and Kunreuther, 8 J Pol Analysis & Mgmt at 572 (cited in note 139) (hypothesizing that "probabilities are presumably overweighted if the outcome is salient"). See also Christine Jolls, Behavioral Economics Analysis of Redistributive Legal Rules, 51 Vand L Rev 1653, 1658-59 (1998) ("[O]verestimation may occur

D. Explanation #4: "Rational"

Finally, plaintiffs' risk-seeking decisions in frivolous litigation, like consumers' risk-seeking decisions to play the lottery, might simply be "rational." Rationality, after all, implies a correlation between an individual's chosen means and her desired ends. Given the individual's chosen ends, we label her conduct "rational" when she selects the means that will best enable her to obtain those ends. 194

Ed McCaffery argues that "a very good many lottery players play [the lottery] because they want to win large sums of money." "Given this end, we test for rationality by checking the relationship between means and end: is playing the lottery a means to the end of acquiring large sums of money?" McCaffery appropriately answers the question "yes," noting that "the simplest and most obvious answer to the question of why people play lotteries is that they want to get large amounts of wealth, quickly, and they have limited options for doing so." McCaffery concludes, in short, that people make the risk-seeking choice to purchase long-shot lottery tickets "to get what lotteries rather efficiently, easily and uniquely offer: a shot at instant wealth."

Frivolous litigation may offer the plaintiff what lotteries offer the consumer—a chance at greater wealth than the individual is likely to obtain all at once from any other source. Thus, plaintiff overweighting of low-probability chances of prevailing at trial might simply constitute rational, or even opportunistic, risk-seeking behavior (at least in high-stakes cases, where the plaintiff has a chance to obtain *substantial* wealth through a trial judgment that she could not obtain through settlement).

when a risk becomes highly visible or salient to people."); Deborah L. Rhode, *Too Much Law, Too Little Justice: Too Much Rhetoric, Too Little Reform*, 11 Georgetown J Legal Ethics 989, 1002 (1998) ("Large tort victories are also more readily recalled than cases with more typical facts. As noted earlier, when events are especially vivid, people tend to overestimate their frequency. The combined effect of selective reporting and selective recall leads to misperceptious of the likelihood of large verdicts, particularly in tort contexts.").

[&]quot;See McCaffery, 1994 Wis L Rev at 93-94 (cited in note 63) (arguing that lottery play may be "rational").

[&]quot; Id at 92. See also Posner, 50 Stan L Rev at 1551 (cited in note 53) (noting that rationality means "choosing the best means to the chooser's ends").

[™] See note 193. See also Korobkin and Guthrie, 76 Tex L Rev at 129–36 (cited in note 16) (noting the importance of the "means-ends distinction" in assessing whether a litigant is behaving rationally in litigation).

[&]quot;McCaffery, 1994 Wis L Rev at 93 (cited in note 63).

^{**} Id.

^{້&}quot; Id.

¹⁸ Id. McCaffery's "rationality" argument hinges on the "indivisibility of desired expenditure items, compounded, perhaps, by constraints on savings." Id at 112. Individuals may behave rationally when they play the lottery to obtain wealth needed to purchase an indivisible item, like a particular sports car or a college education, unavailable to them through savings. Id at 99–112. See also Wakker and Stiggelbout, 15 Medical Decision Making at 182 (cited in note 74).

E. Conclusion

Whether plaintiffs' overweighting of low-probability prospects in frivolous litigation is a product of psychoplysical, inotivational, cognitive, or "rational" forces is, of course, unclear. In all likelihood, some or all of these forces combine with others to produce plaintiffs' psychological taste for risk in frivolous suits. Whatever the explanation, the Frivolous Framing Theory's observation that plaintiffs in frivolous litigation are likely to be risk seeking rather than risk neutral or risk averse provides an important insight into frivolous litigation reform, which I turn to in the next part of the Article.

Second, plaintiffs are likely to fall prey to "self-serving" or "egocentric" biases in which they interpret information in a way that disproportionately favors their own position. This self-serving assessment of information may increase plaintiffs' risk seeking in frivolous litigation. See Linda Babcock and George Loewenstein, Explaining Bargaining Impasse: The Role of Self-Serving Biases, 11 J Econ Perspectives 109 (1997) (reporting research on the impact of self-serving biases on settlement of disputes); Linda Babcock, et al, Biased Judgments of Fairness in Bargaining, 85 Am Econ Rev 1337, 1339-41 (1995) (finding evidence of a self-serving bias in a litigation problem); George Loewenstein, et al, Self-Serving Assessments of Fairness and Pretrial Bargaining, 22 J Legal Stud 135, 149-53 (1993) (reporting that subjects assessing information from the plaintiff's perspective rated the information more favorable to plaintiff than did subjects evaluating the same information from defendant's perspective).

Third, plaintiffs are also likely to fall prey to the closely-related "overconfidence" or "optimism" bias—"the belief that good things are more likely than average to happen to us and bad things are less likely than average to happen to us." Korobkin and Ulen, 89 Cal L Rev (cited in note 21). See also Daniel Kahneman and Amos Tversky, Conflict Resolution: A Cognitive Perspective, in Arrow, et al, eds, Barriers to Conflict Resolution at 45, 46–50 (cited in note 19) (reporting evidence of "optimistic overconfidence" in a litigation study); Neil D. Weinstein, Unrealistic Optimism About Future Life Events, 39 J Personality & Soc Psych 806 (1980) (reporting two studies demonstrating that subjects fall prey to "unrealistic optimism").

Fourth, plaintiffs are more likely to infiate *linguistically*-expressed low-probability risks (for example, "very unlikely") than *numerically*-expressed low-probability risks (for example, "5%"). See Richard Dusenbury and M.G. Fennema, *Linguistic-Numeric Presentation Mode Effects on Risky Option Preferences*, 68 Organizational Beh & Human Decision Processes 109, 119–21 (1996) (finding that decisionmakers prefer linguistic presentation of low-probability gains to numeric presentation of low-probability gains, suggesting that "[1]inguistic presentation may cause decision makers to simulate probabilities higher than the information provider intends or desires").

Finally, ambiguity about the likely outcome may also exacerbate plaintiffs' risk seeking (as well as defendants' risk aversion) in frivolous litigation. See notes 132, 134.

[&]quot;Several other forces may contribute to plaintiffs' risk-seeking behavior in frivolous litigation. First, in addition to overweighting their low-probability prospects of prevailing at trial, plaintiffs may also overestimate their prospects of prevailing. See Kahneman and Tversky, 47 Econometrica at 281 (cited in note 11) ("It is important to distinguish overweighting, which refers to a property of decision weights, from the overestimation that is commonly found in the assessment of the probability of rare events. . . . In many real-life situations, overestimation and overweighting may both operate to increase the impact of rare events.").

V. APPROACHING FRIVOLOUS LITIGATION REFORM

Plaintiffs generally hire lawyers to pursue their frivolous or low-probability claims. Plaintiffs' lawyers typically work on a contingency fee basis, which means that the plaintiffs' lawyer recovers a fee only if the plaintiff succeeds in obtaining a judgment or settlement. Because the plaintiffs' lawyer's fee depends upon the success of the plaintiffs' case, the plaintiffs' lawyer has an incentive to screen out frivolous or low-probability cases, and available evidence suggests that plaintiffs' lawyers do screen out cases, often because they appear to lack sufficient merit.

[™] Ron Gilson and Bob Mnookin argue that "the legal system's central institutional characteristic" is that "litigation is carried out by agents." Ronald J. Gilson and Robert H. Mnookin, Disputing Through Agents: Cooperation and Conflict Between Lawyers in Litigation, 94 Colum L Rev 509, 510 (1994). See also Milton Heumann and Jonathan M. Hyman, Negotiation Methods and Litigation Settlement Methods in New Jersey: "You Can't Always Get What You Want", 12 Ohio St J on Disp Resol 253, 254 (1997) (noting that lawyers "control much of what happens in lawsuits," including deciding "when someone's grievance can be turned into litigation").

See Lester Brickman, Contingency Fee Abuses, Ethical Mandates, and the Disciplinary System: The Case Against Case-by-Case Enforcement, 53 Wash & Lee L Rev 1339, 1349 & n 45 (1996) ("Each year, approximately one million new contingency fee cases are filed."); Deborah R. Hensler, et al, Compensation for Accidental Injuries in the United States 136 (1991) (reporting the results of a RAND study showing that 87 percent of accident claimants who hired a lawyer did so on a contingency fee basis).

⁵² See Herbert M. Kritzer, Rhetoric and Reality ... Uses and Abuses ... Contingencies and Certainties: The American Contingent Fee in Operation 4 (1996) ("The standard description of the contingent fee is 'no win, no pay.' That is, a litigant has to pay his or her attorney only if the litigant in some sense wins the case.").

The contingency fee agreement shifts the risk of litigation from the plaintiffs' lawyer. See, for example, Murray L. Schwartz and Daniel J.B. Mitchell, An Economic Analysis of the Contingent Fee in Personal-Injury Litigation, 22 Stan L Rev 1125, 1125 (1970) ("The contingent fee allows the client to shift some of the risk inherent in his case to the lawyer.").

See Kritzer, 81 Judicature at 23 (cited in note 114) (arguing that "the contingency logic suggests that contingency fee lawyers should reject a large number of potential cases"); Kritzer, Let's Make a Deal at 75 (cited in note 2) (contending that "the incentive structure for contingent-fee lawyers would not lead one to expect them to take cases that have little chance of success if they go to trial"); Kevin M. Clermont and John D. Currivan, Improving on the Contingent Fee, 63 Cornell L Rev 529, 571 (1978) ("Since contingency makes his fee depend on the outcome, the lawyer would shy away from any case with a probability of success so low that it makes the case a poor investment.").

In his recent study of contingency fee lawyers in Wisconsin, for instance, Herbert Kritzer found that the 400+ plaintiffs' lawyers in his study accepted an average of only 35 percent of their prospective cases (14,276 of 40,518). See Kritzer, 81 Judicature at 24 (cited in note 114). While those lawyers devoting relatively more of their practice to contingency fee work were slightly less selective than those with relatively more hourly business, see id at 26, Kritzer still found surprisingly high screening rates across the board. Those who devoted 90 percent or more of their business to contingency fee work, for example, still turned down 40 percent of prospective cases. Id at 25. See also Michael J. Saks, Do We Really Know Anything About the Behavior of the Tort Litigation System—and Why Not?, 140 U Pa L Rev 1147, 1190 (1992) (concluding, based on a review of the evidence available at the time, that "lawyers engage in some filtering of cases and turn away a large number of them").

²⁸ See Kritzer, 81 Judicature at 27 (cited in note 114) (reporting that plaintiffs' lawyers cited "lack of liability" as the most common explanation for screening out a case). Undoubtedly, plain-

Nonetheless, plaintiffs are likely to find attorneys to pursue their frivolous or low-probability cases for a number of reasons. First, there is stiff competition among plaintiffs' lawyers, so not all lawyers have the luxury of turning down prospective clients with shaky claims.2007 Second, even plaintiffs' lawyers with busy dockets are likely to file their share of low-probability cases because they view themselves as "portfolio managers." Like investors seeking to maximize investment outcomes through diversification, 209 plaintiffs' lawyers with busy dockets are likely to diversify their client portfolios by taking some "rational" chances for the sake of high returns. Finally, plaintiffs' lawyers may be unable to assess the merits or likelihood of success of a plaintiff's prospective claim without filing suit and conducting discovery, 211 so some plaintiffs' lawyers will take cases that appear to have a moderate chance of success but turn out later to be low-probability cases. Thus, even though many plaintiffs' lawyers are likely to weed out frivolous cases, persistent plaintiffs are likely to find lawyers to represent them.

Once plaintiffs have retained lawyers to help them pursue their frivolous or low-probability claims, plaintiffs—not their lawyers—have authority under the ethical codes governing the legal profession to de-

tiffs' lawyers also screen out potentially frivolous cases because the ethical rules prohibit frivolous filings, see, for example, Model Rules of Professional Conduct Rule 3.1 (prohibiting lawyers from advancing frivolous claims or defenses), and because of reputational concerns. See, for example, Robert H. Mnookin, Negotiation, Settlement and the Contingent Fee, 47 DePaul L Rev 363, 365 (1998) (contending that lawyers' "concerns about reputation operate to constrain opportunism, at least somewhat"); Richard W. Painter, Litigating on a Contingency: A Monopoly of Champions or a Market for Champerty?, 71 Chi Kent L Rev 625, 670 (1995) (arguing that "reputational capital' is the single largest asset of many lawyers").

Em See Deborah L. Rhode, *The Professionalism Problem*, 39 Wm & Mary L Rev 283, 300 (1998) (noting that "the rising number of lawyers compounds the difficulties of attracting clients, which heightens economic insecurity"); Kenneth Lasson, *Lawyering Askew: Excesses in the Pursuit of Fees and Justice*, 74 BU L Rev 723, 733 (1994) (contending that "[t]he large number of lawyers and their hunger for work have contributed to the rise of outlandish lawsuits").

²⁸⁸ See Kritzer, Rhetoric and Reality at 89 (cited in note 202) ("While I doubt that many contingent fee lawyers have heard of modern portfolio theory, or even think of themselves as managing a portfolio, almost every time I have described the portfolio perspective, the lawyer I was talking to commented on how it seemed to describe his or her situation.").

See Harry M. Markowitz, Foundations of Portfolio Theory, 46 J Fin 469, 470 (1991) (explaining that "diversification is a common and reasonable investment practice" because it "reduce[s] uncertainty"). See also Kritzer, Rhetoric and Reality at 87 (cited in note 202) (explaining that the key argument of Markowitz's portfolio theory "is that investors [should] desire to balance expected return and uncertainty; that is, the utility investors seek to maximize is a combination of expected return and uncertainty").

¹⁰ See Kritzer, Rhetoric and Reality at 85–93 (cited in note 202) (using modern portfolio theory to understand how contingency fee lawyers approach their cases); John C. Coffee, Jr., Understanding the Plaintiff's Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions, 86 Colum L Rev 669, 705 (1986) (identifying "portfolio diversification" as "a strategy that permits the plaintiff's attorney, much as any investor, to reduce the variance associated with an expected return").

²¹¹ See notes 100–102 (identifying uncertainties inherent in the litigation process).

cide whether to litigate further or to settle their cases.²¹² Plaintiffs' lawyers obviously exert influence over their clients' decisionmaking, but plaintiffs' lawyers have an ethical obligation to adhere to their clients' desires in the litigation process.²¹³ Because plaintiffs in frivolous litigation are likely to have a desire for risk not shared by the defendants they have sued,²¹⁴ they are likely to seek judgments or settlements well in excess of the expected value of their cases.²¹⁵ This, in turn, raises both efficiency concerns (i.e., the civil justice system expends more of its scarce resources processing relatively less meritorious cases, thereby detracting from relatively more meritorious cases) and distributive concerns (i.e., plaintiffs recover disproportionately advantageous settlements or even judgments) that reformers may wish to address.

Reformers should base any reform proposals on the positive theory or model that provides the most accurate account of frivolous litigation behavior. The rational actor models provide an elegant framework within which to analyze frivolous litigation, but they make assumptions about litigant decisionmaking that the Frivolous Framing Theory calls into question. The rational actor models assume that litigants are risk-neutral actors who evaluate prospective gains and losses in the same way, while the Frivolous Framing Theory demonstrates that plaintiffs in frivolous suits are risk seeking, that defendants in frivolous suits are risk averse, and that litigants evaluate gains and losses differently.

Based on empirical observations about litigants' risk attitudes, the Frivolous Framing Theory suggests that plaintiffs' tendency to seek risk in frivolous litigation is likely to promote the filing of frivolous claims. Thus, the Frivolous Framing Theory recommends that reformers concerned about the frivolous litigation "problem" focus their efforts on plaintiffs' decisions to file, settle, and try frivolous suits, and cautions that curbing frivolous litigation *might* be more difficult than the rational actor models would suggest.²¹⁶

²¹ See, for example, Model Code of Professional Responsibility EC 7-8 (providing that "[i]n the final analysis... the lawyer should always remember that the decision whether to forego legally available objectives or methods because of non-legal factors is ultimately for the client and not for himself"); id EC 7-7 (providing that "it is for the client to decide whether he will accept a settlement offer"); Model Rules of Professional Conduct Rule 1.2(a) ("A lawyer shall abide by a client's decision whether to accept an offer of settlement of a matter.").

[&]quot;See, for example, Model Code of Professional Responsibility DR 5-101(A) (prohibiting representation if "the exercise of his professional judgment on behalf of his client will be or reasonably may be affected by his own financial, business, property, or personal interests"); Model Rules of Professional Conduct Rule 1.7(b) ("A lawyer shall not represent a client if the representation of that client may be materially limited by ... the lawyer's own interests.").

[&]quot; See Part III.B.

[&]quot;See Part III.C.

⁷¹⁴ Proponents of the rational actor models are reluctant to propose frivolous litigation re-

A. Targeting Plaintiff Risk Seeking

Reformers can tackle plaintiffs' risk-seeking behavior either by combating plaintiffs' tendency to overweight their low-probability prospects of prevailing at trial or by changing the frivolous litigation decision frame so that plaintiffs face at least some prospect of loss. The latter strategy seems more likely to be fruitful than the former.

1. Undermining overweighting.

Whether reformers can successfully counteract plaintiffs' overweighting of their long-shot chances of prevailing at trial depends, of course, on what underlying factor or factors account for that overweighting. If, for example, plaintiffs' overweighting is a cognitive phenomenon caused solely by the salience or vividness heuristic, reformers might be able to provide vivid information about plaintiff losses in frivolous litigation to counteract the widely available and vivid media accounts of plaintiff wins in frivolous litigation. If, by contrast, plaintiffs' overweighting is a product of psychophysical forces—if, in other words, plaintiffs overweight simply because of the way they perceive low probabilities—reformers are likely to have great difficulty mitigating plaintiffs' overweighting.

2. Changing plaintiffs' decision frame.

Reformers are more likely to have success changing the decision frame in frivolous litigation so that plaintiffs face at least some pros-

forms based solely on their frivolous litigation models in large part because of their well placed concern that any reforms they might propose would have a deleterious impact on nonfrivolous as well as frivolous litigation. See, for example, Bebchuk, 25 J Legal Stud at 19-20 (cited in note 38) (modeling the English Rule but not proposing it or any other frivolous litigation reforms); Katz, 10 Intl Rev L & Econ at 17-19, 26 (cited in note 37) (contending that the adoption of strict pleading rules, the Euglish rule of litigation finance, or the requirement of a refundable deposit at filing would likely deter frivolous suits, but noting that "policies proposed to remedy the problem of frivolous lawsuits generally have undesirable effects on the disposition of genuine claims"); Rosenberg and Shavell, 5 Intl Rev L & Econ at 5, 10 (cited in note 30) (noting that the adoption of the English rule of litigation finance would deter frivolous suits but not recommending it because of its impact on other suits); P'ng, 14 Bell J Econ at 549 (cited in note 30) (contending that the English rule would "be an effective deterrent of frivolous suits" but not proposing its adoption). But see Bebchuk, 17 J Legal Stud at 448 (cited in note 36) (recommending that policymakers strive to reduce informational asymmetries in frivolous litigation as a means for minimizing the effectiveness of such suits); Bone, 145 U Pa L Rev at 593-94 (cited in note 1) (proposing a three-step judicial screening approach to curb frivolous suits at the filing stage).

See Part IV.C.

²¹⁸ Indeed, Kritzer explains that attorneys in his Wisconsin study often try to do something akin to this as a way to dampen client expectations. See Kritzer, 23 L & Soc Inquiry at 803–05 (cited in note 114). But see Loewenstein, et al, 22 J Legal Stud at 140 (cited in note 199) (characterizing "overweighting of vivid information" as a bias in probability judgment "not eliminated by incentives for accuracy or feedback").

pect of loss. Due to the way plaintiff-side litigation is financed, plaintiffs in frivolous litigation face a low-probability gains frame in which they have no real prospect of out-of-pocket loss. If reformers were able to change the decision frame so that plaintiffs faced not a "pure gains" frame but a "mixed" frame in which they faced some prospect of loss, the reformers could diminish the attractiveness of litigation to plaintiffs contemplating filing and settling frivolous suits. This "reframing" would have both an economic effect (by altering the expected value of litigation) and a psychological effect (by subjecting plaintiffs to "loss aversion" on plaintiff decisionmaking.

To illustrate, reformers could amend ethical codes like the Model Rules of Professional Responsibility to require plaintiffs to advance their own litigation-related costs (such as filing fees, service fees, discovery costs). Currently, ethical codes prohibit attorneys from providing clients with litigation-related financial assistance, but they create an exception for the advancement of costs. Plaintiffs and contingency fee counsel take advantage of this exception, as plaintiffs' attorneys generally advance their clients' litigation costs.

Although the typical contingency fee agreement specifies that the plaintiff is ultimately responsible for paying costs, either out of any proceeds he recovers, or out-of-pocket in the event his case is unsuccessful, plaintiffs' attorneys "rarely attempt to collect expenses from personal injury clients, both because it would be impractical and be-

¹⁹ In a "pure gains" frame, plaintiff chooses between prospects with positive expected values only, while in a "mixed" frame, plaintiff may choose between prospects with positive and negative expected values. If, for example, plaintiff has a choice between a \$300 settlement offer and a 5 percent chance at a \$6,000 trial judgment that will cost him \$400 in litigation expenses that he has to pay, he faces a choice between one prospect with a positive expected value (\$300 settlement) and one with a negative expected value (a \$300 expected trial verdict less \$400 in trial costs). When choosing between mixed prospects, decisionmakers often exhibit risk-averse preferences. See, for example, Hershey and Schoemaker, 31 Mgmt Sci at 1226 (cited in note 130); Hershey, Kunreuther, and Schoemaker, 28 Mgmt Sci at 947 (cited in note 85).

^{2∞} See note 80.

²¹¹ Model Rules of Professioual Conduct Rule 1.8(e) ("A lawyer shall not provide financial assistance to a client in counection with pending or contemplated litigation, except that: (1) a lawyer may advance court costs and expenses of litigation, the repayment of which may be contingent on the outcome of the matter.").

²² In their study of California civil jury trials conducted in 1990–91, Gross and Syverud found that among individual plaintiffs, the attorney advanced the costs in 84 percent of the cases, the client advanced costs in 11 percent of the cases, and they shared costs in 6 percent of the cases. See Gross and Syverud, 44 UCLA L Rev at 17 (cited in note 190).

Toss and Syverud, 90 Mich L Rev at 349 n 71 (cited in note 103) ("It [contingeut-fee contract] also provides that out-of-pocket expenses of litigation (filing, service fees, the cost of discovery and investigation, expert witness fees, and so on) will be advanced by the attorney, and recovered from any settlement or judgment. If they are not recovered, the plaintiff is, in theory, liable to the attorney for these expenses."); Herbert M. Kritzer, The Wages of Risk: The Returns of Contingency Fee Legal Practice, 47 DePaul L Rev 267, 270 (1998) (noting that in many states plaintiffs are liable for expenses regardless of the outcome of the case).

cause such a practice might drive away future chients."²²⁴ Thus, as a practical matter, frivolous litigation is costless for plaintiffs.

If reformers were to amend the ethical rules governing legal practice to prohibit plaintiffs' attorneys from advancing their clients' costs—if, in other words, plaintiffs themselves were actually required to pay their filing fees, service fees, discovery costs, etc.—plaintiffs might file fewer frivolous or low-probability claims for the obvious reason that they would fear having to pay costs out of their own pockets. Requiring plaintiffs in frivolous litigation to pay costs, in other words, would force them to confront the risk of incurring a loss. "[T]o the extent that plaintiffs are obliged to bear the costs and risks of litigation," Gross and Syverud observe, "they will be more selective in the cases they pursue."

Suppose, for example, that a prospective plaintiff seeks to file a frivolous or low-probability claim against a prospective defendant. Suppose that he meets with a plaintiffs' attorney and learns that the plaintiffs' attorney will represent him provided lie agrees to pay the attorney one-third of any settlement or judgment ultimately recovered. Suppose further that the attorney predicts that the prospective plaintiff has a 5 percent chance of winning \$6,000 at trial if he decides to file suit. Consider the prospective plaintiff's filing decision:

He faces a choice between two options—filing or not filing—with three prospective outcomes—trial win, trial loss, or status quo.²⁷ If he does not have to pay the costs of litigation, he will recover \$4,000 if he files and wins at trial (\$6,000 judgment less 1/3 attorney's fee) or remain in his current financial position if he either opts not to file or if he files and loses. Under the current costs regime, he faces no prospect of loss, so he is likely to decide to file suit.

Now suppose the ethical rules prohibit plaintiffs' attorneys from advancing litigation costs, so the prospective plaintiff learns lie will have to incur \$300 in various costs to pursue his litigation. If litigation costs him \$300, he will recover \$3,700 if he wins at trial (\$6,000 judg-

²⁴ Gross and Syverud, 90 Mich L Rev at 349 n 71 (cited in note 103). See also Kritzer, 47 DePaul L Rev at 270 (cited in note 223) ("While in many states clients are liable for expenses regardless of the outcome of a case, the reality is that lawyers who pursue a case unsuccessfully on a contingency basis seldom collect those expenses (or even seek to collect them).").

Gross and Syverud, 90 Mich L Rev at 380 (cited in note 103).

This appears to be a fairly standard contingency fee. See, for example, id at 349 n 71 (reporting that in their study of litigation in California "[t]he typical contingent fee contract for a plaintiff's attorney in a personal injury case provides that the lawyer will be paid 33% of any settlement at or before the pretrial conference, and 40% of any later settlement or judgment"); Kritzer, 47 DePaul L Rev at 285, 286 (cited in note 223) (noting that "[o]ne-third is the 'standard' contingency fee figure" and reporting that among the contingency fee lawyers in his survey who employed a flat percentage fee, 92 percent used the 33 percent rate).

For the sake of this simple illustration, I am assuming that plaintiff caunot withdraw his claim once he has filed it and that plaintiff "knows" defendant will refuse to settle.

ment less 1/3 attorney's fee less \$300 costs), lose \$300 if he files and loses at trial, or remain in his current financial position if he opts not to file. Under a regime that requires plaintiffs to advance costs, the plaintiff faces a good chance of losing a small sum money if he pursues his claim, so he is more likely to opt not to file suit.

Although it is true that the risk-seeking plaintiff is likely to be attracted to that 5 percent chance of recovering a sizeable judgment at trial, the 95 percent chance he will incur an actual loss (as opposed to no loss at all) is likely to have a potent impact on his decisionmaking. The imposition of a prospective loss will obviously have an *economic* impact on plaintiffs' view of the attractiveness of litigation because it will decrease its expected value. The imposition of a prospective loss will also have a *psychological* impact on the plaintiff because it will subject him to the possibility of loss aversion.

Loss aversion, a component of prospect theory, refers to the well documented empirical phenomenon that losses loom larger than equivalent gains. Stated differently, [t]he aggravation that one experiences in losing a sum of money appears to be greater than the pleasure associated with gaining the same amount. In fact, experimental work suggests that individuals feel at least twice as much pain over a given loss as they feel pleasure over the equivalent gain. Thus, the imposition of a prospective \$300 cost is likely to feel larger than \$300, suggesting that a modest reform proposal like cost-shifting might affect plaintiffs' frivolous litigation filling decisions in fairly dramatic ways. Requiring plaintiffs to pay litigation costs, in short, is likely to change plaintiffs' frame in filling decisions by subjecting plaintiffs to the threat of a small economic loss that will loom large psychologically.

Such a requirement is also likely to change plaintiffs' decision frame in settlement calculations, encouraging plaintiffs who have filed

²³ See Kahneman and Tversky, 47 Econometrica at 279 (cited in note 11).

[™] Id.

Points, 38 Cognitive Psych 79, 87 (1999) ("Studies of risky choice and riskless choice have presented converging evidence that losses are weighted approximately two times more than equivalent gains (the most common values for this 'coefficient of loss aversion' fall between 2 and 4).") (internal citations omitted); Richard H. Thaler, Daniel Kahneman, and Jack L. Knetsch, The Endowment Effect, Loss Aversion, and Status Quo Bias, in Richard H. Thaler, ed, The Winner's Curse: Paradoxes and Anomalies of Economic Life 63, 70 (Princeton 1992) (arguing that the ratio of the slopes of the value function for small or moderate gains and losses is two to one).

²¹ See also Kritzer, 23 L & Soc Inquiry at 811 (cited in note 114) (quoting a plaintiffs' lawyer describing how the attorneys at his prior firm used litigation costs as a way to deter clients from filing suit: "We used to regularly try to frighten people into taking settlements that they didn't want because they were still kind of gung ho on the whole litigation at that point. So when it was a gray-area case, we used to say, 'Yes, pay us \$1,000 and we will file suit.' They wouldn't have the money, so that would be the end of that. It is a pretty efficient way of getting rid of a case where you thought you could get them a settlement but it didn't play out that way.").

frivolous claims to settle in order to avoid paying out-of-pocket costs as they proceed to trial. Indeed, plaintiffs' lawyers occasionally use the threat of hitigation costs to encourage their clients to settle. Kritzer observes, for instance, that plaintiffs' attorneys have been known to demand that their clients reimburse litigation costs the attorneys have advanced to persuade their clients to accept settlement offers defendants have put on the table. "[B]y simply asking the client to provide a check to cover even the relatively small fees involved in filing the court case," Kritzer explains, "the client will pause and reconsider his or her rejection of the settlement offer."22 Similarly, if frivolous litigation reformers were to succeed in amending the ethical codes to require plaintiffs to pay their hitigation costs, plaintiffs would likely be more inclined to settle frivolous litigation than they otherwise would be. In short, then, modifying ethical codes to require plaintiffs to advance their own litigation costs is likely to deter frivolous filings and encourage the settlement of frivolous cases.

B. Cautions

The need for frivolous litigation reforms of any kind is unclear because empirical data on the frivolous litigation "problem" is unavailable. Moreover, frivolous litigation reforms, like amending the ethical codes to require plaintiffs to pay their own out-of-pocket costs, are likely to have a deleterious effect on plaintiffs pursuing relatively more meritorious cases. Even though the costs of litigation are typically but a fraction of the attorney's fees in any case, many prospective plaintiffs will lack the resources to pay them. Thus, requiring plaintiffs to advance costs may deter them from filing relatively more meritorious cases as well as frivolous cases. Thus, reformers should amend the rules governing the advancement of costs only if they are able to determine that there really is a frivolous litigation "problem" and that the benefits of deterring frivolous suits outweigh the costs associated with deterring relatively more meritorious suits.

²² Id at 811. Kritzer notes, however, that "none of the lawyers [he] spoke to acknowledged that they did this as a means to encourage acceptance of a settlement offer," though "one lawyer reported that at a firm where he had previously worked this was a fairly regular practice." Id.

²³ "We know remarkably little about frivolous litigation," Robert Bone explains. "[E]mpirical data is extremely limited, and casual anecdotal evidence highly unreliable." Bone, 145 U Pa L Rev at 520 (cited in note 1). Moreover, reliable empirical data on frivolous litigation may be unobtainable because there are so "many obstacles to reliable empirical work," id at 527, including disagreements regarding the definition of frivolous litigation, problems associated with determining whether any particular suit is frivolous, and difficulties obtaining relevant settlement data, id at 528.

See, for example, note 216.

³³ Yablon argues that "a rule that will deter frivolous litigation without inhibiting meritorious cases [] is simply not attainable. Deterring low-probability claims, by definition, means the

Whatever reform or reforms may be advanced, reformers concerned about the frivolous litigation "problem" would be well advised to take account of the positive theory articulated in this Article. Plaintiffs in frivolous litigation are likely to exhibit risk-seeking behavior, and this risk-seeking behavior is likely to encourage pursuit of frivolous claims. Reformers should thus focus their efforts on plaintiffs' risk-seeking tendencies, either by attempting to counteract plaintiffs' overweighting of their long-shot chances at trial or by attempting to change the decision frame so that plaintiffs face some prospect of loss at trial.

CONCLUSION

Litigation presents litigants with different decision frames that vary depending upon each party's valuation of the litigation options as gains or losses and on each party's estimate of the likelihood of winning or losing at trial.²⁵ Thus, a litigant's view of litigation will depend upon whether she is a plaintiff or defendant and whether she thinks she has a good chance or a not-so-good chance of prevailing at trial.

The Framing Theory predicts that plaintiffs in *ordinary* litigation, who typically choose between a certain settlement offer and a moderate-to-high probability of prevailing at trial, are likely to prefer settlement, while defendants, who typically choose between paying a certain settlement amount and facing a moderate-to-high probability of losing at trial, are likely to prefer trial.²³⁷ Because *defendants* are relatively more likely than plaintiffs to prefer trial in ordinary litigation, defendants are likely to have the upper hand in bargaining, and reformers seeking to promote settlement should target their reform efforts at defendants.²³⁸

loss of some meritorious claims." Yablon, 44 UCLA L Rev at 68 (cited in note 98). See also Katz, 10 Intl Rev L & Econ at 26 (cited in note 37) ("[P]olicies proposed to remedy the problem of frivolous lawsuits generally have undesirable effects on the disposition of genuine claims."). Bone concedes that any regulatory regime might have a detrimental impact on some meritorious claims. He argues, however, that the goal of any regulatory regime should not be "to avoid all adverse effects on meritorious suits," but rather "to strike a sensible balance between the benefit of reducing frivolous suits and the regulatory costs." Bone, 145 U Pa L Rev at 577 (cited in note

²³ See Part II.

See Part II.B.

x8 Korobkin and Ulen, 89 Cal L Rev (cited in note 21).

The Frivolous Framing Theory proposed in this Article, by contrast, predicts that plaintiffs in frivolous or low-probability litigation, who typically choose between a certain settlement offer and a low probability of prevailing at trial, are likely to prefer trial, while defendants, who typically choose between paying a certain small settlement and facing a low probability of losing at trial, are likely to prefer settlement. Because *plaintiffs* in frivolous litigation are relatively more likely than defendants to prefer trial, plaintiffs are likely to have the upper hand in bargaining, and reformers seeking to deter frivolous litigation or to promote its settlement should target their efforts at plaintiffs.

The Frivolous Framing Theory, in short, enriches both the Framing Theory of ordinary litigation and the rational actor models of frivolous litigation by providing insight into the behavior of hitigants embroiled in frivolous suits, perhaps the most visible and controversial type of suit in our civil justice system.

²³⁹ See Part III.

²⁴⁰ See Part V.A.