

A Skeptic's Guide to the Unusual Behavior of Litigation Agents

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January 7, 2020

Abstract

The law and economics literature often ignores human idiosyncrasies in developing models of litigants' behavior. Even those models that do incorporate non-monetary incentives are entirely based in the expected utility theory which does not (yet) allow for the incorporation of systematic (as opposed to random) biases. The study of those biases belongs in the field of behavioral economics and provides insights into litigants' behavior which complement the classical economics analysis to produce better predictions. In addition, awareness of those biases can promote efficiency-enhancing initiatives by litigants, their attorneys, and the policymakers who shape the litigation process.

1 Foreword

Although self-contained, this article is meant as a refinement of Abadi, *The Economics of Litigation*, 2019. That article contributed to the law and economics literature by incorporating non-monetary incentives (e.g., a desire for justice, clearing one's name, having one's day in court, revenge, etc.) into my suit and settlement model.

While, I was pleased with the outcome and readers' response, I was still bothered that my model did not account for litigants' biases. This article is an effort to complete the previous model (which was entirely based on expected utility theory) with insights from behavioral economics, in particular framing theory.

I must admit that I have conflicted feelings towards behavioral economics. While I consider some of the insights gleaned by the discipline (i.e., hyperbolic discounting, loss-aversion) enlightening, I find the fact that behavioral economics is a series of observations, not a unified theory (i.e., it explains certain deviations from results predicted by classic economics but does not constitute a stand-alone science), unsettling. In addition, not being much of an empiricist myself, I cannot help (because of *my* own ignorance), second-guessing whether the survey-based techniques on which the field relies may not be subject to systematic biases, strategic behavior, or lack of incentive compatibility.

So while, like Freud's students did¹, I wait for the illusion to be turned into sets of electro-chemical equations that will one day be proven, I decided to accept as proven the observations of behavioral economics which most resonated with my own and apply them to a field I have always be interested in: the deviations in litigants' behavior from Posner's *homo economicus* paradigm. So this is an *arguendo* article: it assumes as true some of behavioral economics' observations to either explain or predict litigation behaviors which deviate from those expected by classical economics.

I ask for the readers' indulgence in my selective choice of the behavioral economics observations I decided to rely on and, of course, on any mistake from this layman in his understanding of the law generally and the rules of civil procedure in particular.

2 Introduction

Every litigant gambles. When they choose to file suit, take discovery, file motions, decline settlement offers, and appeal, they take chances. But how do litigants view those decisions? Do they view them as gambles or as actions with more certain outcomes? Understanding litigants' proclivities for risk is essential to understanding their behavior, the nature of litigation, and the likely impact on the civil justice system. Current theories of litigation fail to account for the possibility that litigants' decision-making under risk and uncertainty may not comport with rational theories of behavior, and they therefore fail to paint a

¹“Our description's insufficiencies would be doubtlessly erased if we could already replace psychological terms with physiological or chemical ones.”, Freud, *Beyond the Pleasure Principle*, 1919

complete portrait of litigation.

The dominant model of litigation today is the economic model of suit and settlement. Over the past fifty years, the law and economics field has produced a fairly consistent model describing litigants' behavior.² Although this literature highlights the settlement process³, it also includes papers modeling other aspects of litigation, including discovery⁴, appeal⁵, and alternative dispute resolution.⁶ Along with a growing complexity and scope, this field has witnessed increasing influence in the public debate on litigation reform. Evaluated in terms of explanatory power, productivity, and influence, the law and economics of litigation has been a success. According to a review by Cooter and Rubinfeld, the field has flourished on the strength of its underlying theory of human behavior. Because “[e]conomics was able to provide ... the behavioral theory ...that legal theory lacked,”⁷ the economics of suit and settlement has filled an intellectual vacuum and spread “[l]ike the rabbit in Australia.”⁸

But has law and economics provided the *right* behavioral theory? All the economic models of suit and settlement depend on the assumption that litigants make choices designed to provide them with the best outcomes.⁹ This article challenges that assumption. Empirical studies of human decision-making by cognitive psychologists suggest that it is unlikely that the expected utility model accurately describes the behavior of litigants. Therefore, modifying the expected utility model by incorporating theories of cognitive psychology could lead to a richer and more accurate model of suit and settlement.

Expected utility models of litigation tend to fail most often at the risky end of the spectrum. Obviously, the risk-neutrality assumption (which implies that litigants act in a wealth-maximizing manner) is often unrealistic. But suit and settlement models do allow for risk-aversion, since litigants are assumed to maximize *utility*, not *wealth*.¹⁰ Many

²Work on the economics of litigation started with three articles published in the early 1970s; Gould, *The Economics of Legal Conflicts*, 1973; Landes, *An Economic Analysis of the Courts*, 1971; Posner, *An Economic Approach to Legal Procedure and Judicial Administration*, 1973. Significant contributions to the field include Priest, Klein, *The Solution of Disputes for Litigation*, 1984 (using the economic model to predict that suits that fail to settle before trial will have a 50% chance of a plaintiff's verdict); Shavell, *The Social Versus the Private Incentive to Bring Suit in a Costly Legal System*, 1982 (demonstrating the divergence between private and social goods in litigation and adopting a general model of the economics of litigation). An excellent review of this literature can be found in Cooter, Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, 1989.

³All three of the early works describe the settlement process in detail. Most of the works reviewed by Cooter, Rubinfeld, also discuss settlement.

⁴Hay, *Effort, Information, Settlement, Trial*, 1995 (applying the economic model to the process of acquiring information for trial); Shavell, *Sharing of Information Prior to Settlement or Litigation*, 1989.

⁵Shavell, *The Appeals Process as a Means of Error Correction*, 1995.

⁶Shavell, *Alternative Dispute Resolution: An Economic Analysis*, 1995.

⁷Cooter, Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution* 1989.

⁸Id.

⁹That is, the models rely on the “rational model” of decision-making (the “expected utility” model)

¹⁰Utility is a concave function of wealth, i.e., the first dollar one owns is more valuable than the second dollar, etc.

scholars in the field also note that other factors, such as desire for justice, process, fairness, or one's day in court may influence decision-making as well, but either hold these factors aside, or incorporate them into the economic costs and benefits of litigation.¹¹

In this article, I do not question the basic premise that litigants *try* to achieve the most favorable options when risk and uncertainty are involved. A significant body of data gathered by cognitive psychologists studying behavioral decision theory¹² suggests that the structure of many choices lures people into making decisions that are suboptimal from the perspective of a rational model.¹³ The research also suggests that suboptimal choices often result from the limitations of human decision-making skills rather than from a lack of effort or motivation.¹⁴ Just as visual illusions may fool our perceptual senses, so too may decision-making illusions fool our judgment.¹⁵ This is not to say that humans are incompetent decision-makers. Our judgment sees us through most situations quite well. The lesson of behavioral decision theory is merely that in certain predictable circumstances, people's judgment will lead them astray. In this article, I posit that litigation is one of these circumstances.

Behavioral decision theory suggests that plaintiffs and defendants face markedly different decisions in litigation. For example, consider the issue of settlement. Plaintiffs typically choose between accepting a sure gain by settling a case, and accepting an uncertain but potentially more rewarding outcome by litigating further. In contrast, defendants choose between accepting a sure loss by settling, and accepting an uncertain but potentially worse outcome by litigating further. Research by Daniel Kahneman and Amos Tversky has demonstrated that when people choose among gains, they tend to make risk-averse choices, preferring sure gains over larger but riskier gains.¹⁶ Conversely, when people choose among losses, they tend to make risk-seeking choices, preferring riskier outcomes over sure losses. Characterizing a decision as a loss or a gain, which Kahneman and Tversky refer to as a decision's "frame", determines the risk preferences of the decision-maker. The law and economics literature asserts that litigants will make either risk-neutral or risk-averse decisions, depending upon their wealth; behavioral decision theory suggests that, regardless of wealth, litigants' risk preferences will vary systematically, depending on whether they are in the role of the plaintiff or defendant. Section 3 of this article describes the behavioral theory in more detail.

Evidence from real and hypothetical disputes suggests that risk preferences, particularly in settlement decisions, vary with a party's role. Responses to a number of controlled

¹¹Huang, Wu, *Psychological Emotional Responses in Litigation*, 1989; Abadi, *The Economics of Litigation*, 2019

¹²Behavioral decision theory refers to the empirical study of human decision-making. The seminal text in this field is an edited collection of works: Kahneman, Slovic, Tversky, *Judgment Under Uncertainty: Heuristics and Biases*, 1982

¹³Id.

¹⁴Id.

¹⁵Id.

¹⁶Kahneman, Tversky, *Choices, Values, and Frames*, 2000

hypothetical scenarios demonstrate that the appeal of a settlement depends on whether the settlement is characterized as a loss or as a gain. Earlier work by others shows that settlement offers presented as gains are more compelling than if presented as losses.

A series of findings on actual settlement negotiations reveals that settlements are much lower than the expected utility models of suit and settlement would predict. Similarly, other data shows that increasing the risk associated with litigation emboldens defendants, making them less inclined to settle. The pattern of data uncovered in the field of research is difficult to reconcile with the expected utility model of litigation, but it is consistent with the framing theory, which predicts a consistent divergence in risk preferences between plaintiff and defendant. Section 4 of this article presents examples that support the framing theory of risk preferences in litigation and describes data collected by others which also supports the theory.

The framing theory of litigation has several policy implications. First, understanding the impact of framing on litigation creates a new perspective on the role of attorneys in litigation. Their ability to present settlement offers to clients as either gains or losses gives them the power to overcome their clients' cognitive biases, thus reducing litigation costs. Second, certain categories of litigation, those in which both parties face potential losses, will induce risk-seeking behavior by *both* litigants, thereby encouraging protracted litigation and making settlement less likely. Policymakers should attend to the framing problem and structure disputes to avoid such situations. Section 5 of this article describes these implications.

3 Framing of Decisions , Risk Preferences, and Litigation

Behavioral decision theory rests upon a different theoretical foundation than expected utility theory. Expected utility models of choice assume to maximize utility in making a decision. Although this model has proven incredibly robust and has demonstrated itself to be an invaluable tool, it has limitations. A number of observed phenomena of judgment are inconsistent with the expected utility model. Behavioral decision theory, by contrast, de-emphasizes rationality but incorporates empirical observations of judgment and choice into a model of decision-making. The leading example of behavioral a decision theory model of choice is Kahneman and Tversky's prospect theory.¹⁷

Although prospect theory differs in many ways from expected utility theory,¹⁸the most

¹⁷Kahneman, Tversky, *Choices, Values, and Frames*, 2000; Tversky, Kahneman, *Prospect Theory*, 1979; Tversky, Kahneman, *Rational Choice*, 1986; Tversky, Kahneman, *The Psychology of Choice*, 1981.

¹⁸As Tversky and Kahneman describe it, two principal features of prospect theory distinguishing it from expected utility theory: "The key elements of [prospect] theory are 1) a value function that is concave for gains, convex for losses, and steeper for losses than for gains, and 2) a non-linear transformation of the probability scale, which overweights small probabilities and underweights moderate and high probabilities." Tversky, Kahneman, *Cumulative Representation of Uncertainty*, 1992. This article focuses on one aspect of the first characteristic – the value function that is concave for gains and convex for losses.

significant difference for models of suit and settlement lies in their treatment of risk preferences. Expected utility theory predicts that people make either depending only on the final outcome. In contrast, prospect theory predicts that such final outcome is assigned a utility relative to a reference point.¹⁹ In particular, prospect theory's prediction that people make risk-seeking choices in the face of potential losses differs sharply from expected utility theory, which assumes that people never deliberately make risk-seeking choices.²⁰

Although the economic models of suit and settlement allow for the possibility that parties make risk-seeking choices, this possibility is not taken seriously.²¹ Virtually all of the studies on suit and settlement presume that litigants make risk-neutral or risk-averse decisions.²² There is good reason to make this assumption – risk-seeking decisions are costly. Parties who make risk-seeking decisions will sacrifice utility for no apparent reason. Nevertheless, research from behavioral decision theory suggests that parties facing potential losses in litigation will make decisions that appear risk-seeking.

3.1 Risk Preferences and Decision Frame

Why would anyone make a risk-seeking decision in litigation? Absent a pathological penchant for risk, risk-seeking choices make no sense. One plausible explanation for apparent risk-seeking litigation decisions is that the litigant is willing to pay for vindication. Parties may litigate doggedly in pursuit of perfectly rational concerns, such as defending their good name or vindicating an injustice. Likewise, litigious behavior may arise from emotional responses to the case or from an affinity for process. All these concerns could, of course be incorporated into economic models of suit and settlement. The framing effect, however, suggests that *even a model that incorporates such concerns remains incomplete*. The structure of the litigation for typical defendants as a choice among losses leads them to make decisions that appear risk-seeking, even after accounting for non-monetary considerations. *The nature of litigation invites a bias in decision-making that induces risk-seeking choices.*

As noted above, research by Tversky and Kahneman reveals that risk preferences depend upon characterizing a decision as a gain or a loss. Indeed, when people choose among potential gains, they tend to be risk-averse, but when they choose among potential losses, they tend to be risk-seeking. The nature of the decision, which Tversky and Kahneman refer to as the decision's "frame", heavily influences people's risk preferences.

Kahneman and Tversky explain the tendency to gamble in the face of losses and the tendency to play it safe in the face of gains as arising from the structure of the decision: they

¹⁹Kahneman, Tversky, *Choices, Values, and Frames*, 2000

²⁰Both the economic and psychological theories predict that parties facing potential gains make risk-averse choices. The economic theory predicts that risk-aversion dissipates as an individual's wealth rises relative to the amount at stake – a prediction not shared by prospect theory.

²¹Gould, *The Economics of Legal Conflicts*, 1973, ridicules the notion that litigants make risk-seeking choices by noting that such litigants "would be better off not going to court and making the bet on the outcome of a suitably chosen random number generator, because the court costs could then be avoided."

²²Cooter, Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, 1989

propose the decision frame as a form of *representational* problem²³, meaning that the cognitive structure of the decision leads people to prefer one choice over the other.²⁴ Breaking out of the representation and recasting the decision presents a cognitive challenge that may be unsurmountable, especially because it is not obvious to the decision-maker that an alternative frame even exists. Thus, increasing the motivations of individuals to get to the “right” answer does not ameliorate the bias. Indeed, increasing a decision-maker’s motivations actually magnifies the effect.²⁵ Even adding significant financial incentives does not eliminate the bias.²⁶ That it is possible to recast or reframe the problem so as to make the representational bias apparent does not matter – decision-makers resist such efforts and may not be able to break out of the representational structure without significant prodding.²⁷

The framing effect makes traditional microeconomic modeling of decisions difficult. Since any decision may be cast in terms of gains or losses, a researcher has no way of knowing in advance whether people will make risk-averse or risk-seeking choices. Furthermore, although rational models of choice may avoid concerns with irrational preferences by assuming that such irrationalities are distributed randomly, framing effects negate that luxury. Decisions will systematically follow risk-averse or risk-seeking patterns, depending upon the dominant frame of a decision-making task. Finally, the effect is large enough that it cannot sensibly be ignored. Thus, “predicting frames” becomes an important component of models of decision-making under uncertainty.

3.2 Framing Decisions in Litigation

Most decisions concerning the course of litigation involve risk. As a result, litigation decisions are influenced by the risk preferences of the parties, which, in turn, are determined by the character of the decision as a gain or as a loss. Therefore, predicting the behavior of litigants requires an understanding of whether a party views their decision from the perspective of a gain or a loss.

²³“it is more natural to consider financial outcomes as gains or losses rather than as states of wealth”, Kahneman, Tversky, *Choices, Values, and Frames*

²⁴Mathematical problems presented in verbal form are one of the most commonly encountered representational problems. These verbal problems often suggest misleading imagery and the answer is made transparent only by reducing the problem to its algebraic form.

²⁵Several studies, e.g. Grether, Plott, *Economic Theory of Choice and the Preference Reversal Phenomenon*, 1979, have shown that attaching cash incentives to gambles does not eliminate the risk preferences with frame.

²⁶In *Examining Risk Preferences Under High Monetary Incentives: Experimental Evidence from the People’s Republic of China*, Kachmeier, Shehata (1992), provided subjects with the opportunity to win the equivalent of three times their monthly wages, and found behavior that was dramatically inconsistent with expected utility theory.

²⁷Representational biases stand in sharp contrast to *computational* biases, which can be ameliorated by increasing motivation or effort, e.g. Friedman *The Three Door Anomaly: construction and Deconstruction*, 1996

Settlement choices seem particularly vulnerable to framing effects. Consider the following litigation setting:

Version1: Suppose that you are the plaintiff in a copyright infringement lawsuit. You are suing for the \$400,000 that the defendant allegedly earned by violating the copyright. Trial is in two days and the defendant has offered to pay \$200,000 as a final settlement. If you turn it down, you believe that your chances of prevailing at trial and getting a \$400,000 judgment are 50%.

Do you agree to accept the settlement? (please email me your answer to version1@decisionboundaries.com before reading any further)

Version 2: Suppose that you are the defendant in a copyright infringement lawsuit. You are being sued for the \$400,000 that you allegedly earned by violating the copyright. Trial is in two days and the plaintiff has offered to accept \$200,000 as a final settlement. If you turn it down, you believe that your chances of losing at trial and becoming liable for a \$400,000 judgment are 50%.

Do you agree to pay the settlement? (please email me your answer to version2@decisionboundaries.com before reading any further)

Both versions represent identical economic outcomes. Both parties choose between keeping \$200,000 for sure and gamble with a 50% chance of winning \$400,000 or \$0. The context of litigation, however, sets up the defendant as the stakeholder, making it appear that the defendant chooses among losses while the plaintiff chooses among gains.

I will report back the result once I gather a statistically-significant number of answers, but framing theory suggests that a supermajority of readers will choose to accept the Version 1 settlement and that only a small minority will choose to accept the Version 2 settlement.

Litigation appears to supply a natural frame. 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. Hence, cross-claims aside, litigation presents a fairly consistent frame.

Aside from the frame, other factors probably affect the settlement decisions of plaintiffs and defendants differently. Defendants accused of some wrongdoing may have a greater interest in personal vindication of their good name than their adversaries. For their part, plaintiffs may have more interest in pursuing litigation as a means of avenging or publicizing a personal grievance. Even restricting the discussion to monetary outcomes, plaintiffs more likely consist of individuals with more limited wealth than the defendants, which are more likely to be corporate entities. As a result, differences in their willingness to settle may reflect the risk preferences of the parties. Persistent differences in willingness to settle may therefore result from a variety of factors other than the framing effect, but as demonstrated in the hypothetical above and as described in the next section, empirical evidence supports the hypothesis that framing significantly influences decision-making in litigation.

3.3 Risk Preferences in Actual Settlement Negotiations

Few studies that reveal the risk preferences of actual litigants exist. Settlement choices present perhaps the most accessible source of information related to risk preferences, because data on the outcome of cases is widely available on the internet and proprietary databases²⁸, and data on settlements are also, to a lesser extent, accessible.²⁹ However, in order to estimate litigants' risk preferences, both the settlement offers and the trial outcome from a case are necessary. Settlements alone do not reveal the expected value of the suit and, without settlement offers, the outcome at trial reveals little about the litigants' preferences.

Fortunately, databases containing both settlement offers and trial outcomes are available. Gross and Syverud published a study analyzing unsuccessful settlement talks.³⁰ The authors collected data from verdictsearch.com, which also reports the results of pre-trial settlement talks. The authors compared the final settlement offers to defendants to the results at trial and divided the data into several classes of litigation: personal injury, vehicular negligence, medical malpractice, commercial transactions, employment, and real estate. In every category in which an inference can be made, the expected trial award exceeded the average final settlement offer made by the defendants.

This result supports the framing theory. If defendants are engaged in risk-seeking litigation strategies, then they should be reluctant to settle and make settlement offers that are lower than the expected value at trial. Gross and Syverud's data shows that real defendants seem to prefer a litigated outcome to a settlement.

Expected utility theory could explain these data, however, if the plaintiffs in the data tended to be less wealthy than the defendants. If this were the case, the defendants may have made low offers believing their adversaries to be risk-averse and, therefore, more inclined to settle. The defendants in these cases may simply have overestimated the plaintiffs' risk-aversion. Because many of the cases in the study involve the types of disputes in which risk-averse individuals sue risk-neutral corporate litigants, the data may support expected utility theory just as much as it supports framing theory. However, even in commercial disputes, which presumably involve risk-neutral parties, the settlement offers were lower than expected utility theory predicts. In fact, in commercial disputes, Gross and Syverud describe plaintiffs' settlement demands as "measly" and note that "defendants frequently refuse to offer anything." Thus, these data are difficult to reconcile with expected utility theory, but correspond exactly with the model presented in this article.

²⁸e.g., *Judicial Statistical Inquiry Form*, <http://thttp://legal1.cit.cornell.edu:8090/> (containing termination data on every suit filed in federal court over the past 22 years, along with software to analyze it); *The Inter-university Consortium for Political and Social Research (ICPSR) Homepage*, <http://icpsr.umich.edu> (contains files with jury verdict data from California and Cook County, Illinois). WESTLAW and LEXIS also include jury verdict databases.

²⁹e.g., <http://verdictsearch.com> reports settlement information

³⁰Gross, Syverud, *Getting to No: A Study of Settlement Negotiations and the Selection of Cases for Trial*, 1991

4 Implications

The framing theory's influence over decision-making in litigation has several implications for the literature on suit and settlement. I discuss two of these briefly. First, the theory predicts that litigation in which all parties see themselves as confronting losses will be extremely difficult to settle. In such cases, both parties will make costly, risk-seeking choices. Second, the theory suggests that lawyers, as negotiators and counselors, have the power to recast litigation for their clients, thereby ameliorating some of the costs associated with framing.

4.1 Disputes That Are Difficult to Resolve

Policymaking bodies like courts, legislatures, and administrative agencies have the ability to alter a litigator's frame. Thus far I have described litigation in a fairly generic fashion – one plaintiff and one defendant (who is also a stakeholder). Litigation, however, is often significantly more complicated, and framing is somewhat more malleable than the basic theory presented here. Different characteristics of a dispute might lead parties to adopt different frames within litigation. Although the only true means to determine the frame of a decision is to observe the behavior empirically, some general predictions can be made about certain types of disputes and the likely frames parties will adopt. Furthermore, tinkering with frames can raise or lower the social costs of litigation.

Framing theory suggests that litigation in which both parties view themselves as the stakeholder should be particularly costly because each party will make risk-seeking choices.³¹ For example, divorce suits involve the division of property, ensuring that both husband and wife conclude the litigation with less than they started with. Both must necessarily lose some property that they once shared an entitlement to and, therefore, litigate as if any settlement is a loss. In addition to the emotional intensity that divorce suits entail, the losses attached to them ensure that divorce litigation is much more protracted than the expected utility theory predicts.

Courts, legislatures, agencies, or other parties in control of the background context of a dispute have some power to avoid the problem of loss-loss litigation. The IRS probably provides one of the best examples of the use of framing in the public context. Taxes in the United States must be withheld during the year from individual employees' paychecks, and at the end of the year the employee often files to have some of these funds returned. Clearly, this puts the government ahead of the game simply through the time value of money – the government gets its money earlier and can spend it earlier. But also, it puts the taxpayer in a gains frame when the taxpayer files a return at the end of the year. For example, imagine two employees with different withholding rates but facing the same annual net tax

³¹The suggestion that a risk-seeking orientation can frustrate the dispute resolution process is not new and was first suggested by Farber and Katz, *Interest Arbitration, Outcomes, and the Incentive to Bargain*, 1979

bill. Imagine that they both must pay \$1,000 in annual taxes but may consider taking a questionable deduction worth \$100. Further, suppose that \$1,100 has been withheld from Employee A's salary during the year and, thus, at tax time the employee faces a choice between receiving a \$100 return for sure, or a risky \$200 return if they take the deduction. Compare this choice with that of Employee B, who has had only \$900 withheld during the year and, thus, at tax time, faces a choice between paying \$100 for sure or gambling that paying \$0 will be worth the risk of taking the illegal deduction. Both employees face the same economic choice, but the research suggests that Employee B is more likely to cheat than Employee A.

Other agencies in other areas of law do not find themselves in such a favorable position. Compare the situation of the IRS collecting taxes to that of the EPA in its efforts to obtain compensation for the cleanup of hazardous waste sites under CERCLA. Under CERCLA, the EPA must identify hazardous waste facilities that are leaking waste into the environment and organize a cleanup. The EPA must pay for it with federal funds and recover the expenses from the parties responsible for the facility. Because each responsible party is jointly and severally liable for the cost of the cleanup and almost no real defenses are available, CERCLA's defendants should settle quickly. However, this has not been CERCLA's fate. A significant portion of the money spent on CERCLA has gone toward litigating liability, both against the EPA and between responsible parties. The EPA's collection problems, as compared to the IRS, are manifold. But one source of their difficulties lies in the fact that the agency must perpetually recover money from parties who treat payments as losses. The IRS, in contrast, collects much of its money in surreptitious ways, and in a dispute it is often dealing with parties who are worried about foregone gains rather than future losses. Hence, the EPA's targets are much more likely to litigate their liability than the IRS's targets are.

The framing theory suggests several ways that CERCLA could be administered so as to ameliorate some of its collection woes. For example, a tax on generators of hazardous waste could fund the program. Currently, taxes on chemical feedstocks pay for some of the costs of cleanup, but this covers only a fraction of the cost. Increasing this tax to pay for the whole program, and perhaps returning funds to generators that can demonstrate that they are not responsible for improper disposal practices would alter the frame. Alternatively, the EPA could use some sort of initial allocation scheme to divide liability early in the case. This allocation may then serve to set the responsible party's status quo. Rather than viewing the payment of this amount as a loss, the parties may then view paying less than this as a gain.

4.2 The Role of Attorneys

Initially, attorneys seem to face an incentive structure that promotes wasteful litigation. To the extent that the litigation lasts longer and the parties decline to settle, attorneys make more money in fees. A more thorough analysis, however, suggests that in many con-

texts attorneys play a positive role in reducing litigants' costs. Contingency arrangements are the obvious example but even hourly fee attorneys may be more interested in maintaining a continuing relationship with their clients than extracting extra fees in any single case. Gilson and Mnookin also have proposed that attorneys have the ability to avoid the prisoner's dilemma that litigation creates.³² Thus, it is unclear whether attorneys are a positive or a negative influence on the social costs of litigation.

The framing theory suggests another positive influence attorneys may have in reducing the costs of litigation. An attorney may have some power to reframe a settlement offer, sparing the client the most costly aspects of framing.³³ For example, consider a defendant's settlement decision. Settling requires that the defendant accept a sure loss over a gamble, and the framing effect makes it unlikely that a defendant would make such a choice. But the attorney may be in a position to reframe the litigation, perhaps by pointing out the losses that the defendant is sure to face from continued litigation or by pointing out that a settlement offer is an improvement over previous offers. The attorney is in a position to wrestle the defendant out of the loss frame that would lead the defendant to make risk-seeking choices.³⁴ The main benefit that framing theory presents for attorneys lies in the attorney's perspective on the client's choices. Framing asserts, after all, that clients are in

³²Gilson, Mnookin, *Disputing Through Agents: Cooperation and Conflict Between Lawyers in Litigation*, 1994. The dilemma arises in this way: Once a dispute occurs, each party has the incentive to engage in the most vicious, aggressive strategy possible. Aggressive maneuvers in a dispute can include such tactics as filing suit first, engaging in extensive discovery, refusing to participate in mediation, refusing to settle, and filing an appeal instead of settling after trial. From an individual disputant's perspective, regardless of the tactics taken by the other side, they are better off being more aggressive. If the other side takes a conciliatory approach to the dispute, aggressive tactics can lead to terrific gains from exploiting the adversary's weak position, and thus is individually an optimal strategy. Likewise, if the opponent engages in an aggressive style, aggression is a good defensive response to keep one from being taken advantage of by the opponent. The collective outcome, however, is inefficient – parties spend more on litigation than they would have had they both cooperated. A key feature of the prisoner's dilemma is the difficulty of demonstrating a commitment to cooperation. If opposing parties can signal their willingness to cooperate to the other party, they can avoid the dilemma. Gilson and Mnookin propose that attorneys can play a role in breaking this prisoner's dilemma. They hypothesize that some firms will build reputations as conciliatory, low-cost litigators, while others will bill themselves as aggressive, hardball (but expensive) litigators. By hiring a conciliatory attorney or firm, litigants can signal their intention to cooperate in the litigation. Litigants then effectively commit themselves to a certain degree of cooperation that the opponent can match by hiring an attorney of similar temperament.

³³The notion that institutional agents, such as attorneys, alter decision-making in a way that avoids cognitive biases has been suggested by Macey, *Packaged Preferences and the Institutional Transformation of Interests*, 1994

³⁴It is obviously possible for the attorney to become trapped in a costly, risk-seeking loss frame as well. Because the attorney is not actually paying the settlement, however, it seems less likely that the attorney will suffer the bias to the same extent as their client. The attorney's perspective on the case almost surely differs in many ways from the client's and, although the attorney is subject to bias as well, the attorney's bias may be different and less costly. In other contexts, it has been shown that experts in a field potentially have much greater ability to look beyond the frame and make choices that comport more closely with expected utility theory than lay people.

a bad position to make decisions in their best interest. To the extent that an attorney is concerned with promoting the client's best interest, framing theory gives them a significant role.

The attorney, of course, may use the ability to influence the client's settlement decision to encourage the client to reject a settlement offer as well. As easily as an attorney can remind a client of the positive progress made in the litigation, an attorney can encourage the client to recall the losses that gave rise to the litigation in the first place. Thus, the framing model of litigation affords the attorney a powerful role. The attorney can control the client's frame, thereby influencing settlement decisions in either direction. The attorney may or may not use this ability to serve the client's best interests. An avaricious defense attorney who works on an hourly rate may portray all settlement offers as losses so as to encourage their client's risk-seeking proclivities. After all, the attorney is the principal beneficiary of risk-seeking decisions in litigation. Likewise, a plaintiff's attorney operating on contingency and interested in a quick settlement, may encourage the client's inherent risk-aversion.

It is worth noting that the attorney's power to assist the client in avoiding or encouraging costly irrationality lies largely outside of the rules of ethical conduct. The rules require that attorneys convey settlement offer to clients faithfully.³⁵ They do not, however, make any requirements of attorneys as to *how* to convey the settlement offer or in what frame to present it. This is distinguished from giving the client bad advice to accept or reject settlements – which is prohibited.³⁶ For good or bad, attorneys probably have unchecked power to encourage a client to reject or accept a settlement offer, even assuming they remain faithful to the ethics rules.

The role of attorneys as promoters of efficiency and avoiders of irrationality has limits. Sometimes the representational power of the original frame might require so much cognitive effort that reframing cannot occur without it making it obvious to the client that significant amounts of money are at stake. In turn, this may require that the client start receiving large bills for attorneys' fees or large but plausible settlement offers from the plaintiffs. Thus, reframing may save the client money but there is a limit to the attorney's power to save clients from their own biases.

5 Conclusion

The expected utility model of litigation has proven enormously useful. The model has inspired a productive line of scholarship that has influenced public debate. Its basic tenets

³⁵ *Model Rules of Professional Conduct*, Rule 1.2(a) (stating that the client must make all settlement decisions), and Rule 1.4 (creating a duty to communicate with the client to enable them to make informed decisions).

³⁶ *Model Rules of Professional Conduct*, Rule 2.1: "A client is entitled to straightforward advice expressing the lawyer's honest assessment."

are almost certainly irrefutable: As the size of the stakes rises, the size of potential settlement rises, and the amount that both parties spend on litigation also rises. But the theory is less useful on the finer details of litigation.

Behavioral decision theory has much to offer the law and economics literature. The alternative to the expected utility model of human choice is not chaos and uncertainty. The failure to incorporate observed phenomena of human judgment subjects the law and economics literature to easily-avoided criticism. While it is true that incorporating such biases into the literature adds complexity, this added complexity is worth having. As this article shows, adding the notion of risk-seeking defendants to an existing set of law and economics literature need not subvert the basic endeavor. Rather, doing so enriches the field, elicits new hypotheses, and provides for greater predictive power.