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Insurers, Illusions of Judgment & Litigation

Chris Guthrie Jeffrey J. Rachlinski

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Insurers play a critical role in the civil justice system. By providing liability insurance to parties who would otherwise be untenable as defendants, insurers make litigation possible. Once litigation materializes, insurers provide representation, pay legal fees, and often play a central role in resolving disputes through settlement or adjudication. In this paper, we explore empirically how these key litigation players make important decisions in the litigation process, like evaluating a case, deciding whether to settle, and if so, on what terms. We find that insurers, though not entirely immune to the effects of cognitive illusions that have been shown to distort litigation decision making, appear to make decisions in a more economically rational fashion than other litigation players. This finding, though preliminary, casts new light on litigation theory and practice.

Insurers, Illusions of Judgment & Litigation

Chris Guthrie* & Jeffrey J Rachlinski**

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I. INTRODUCTION

Litigation brings out the worst in people. The fact that a dispute gets litigated means that it is unusually contentious; parties turn to the courts only as a last resort. In such disputes, the parties are apt to behave unreasonably and to struggle to make rational decisions. But perhaps those parties who have greater experience with the contentious and uncertain world of litigation might make more

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^{1.} See Richard E. Miller & Austin Sarat, Grievances, Claims and Disputes: Assessing the Adversary Culture, 15 LAW & SOCY REV. 525, 544 (1980) (showing that for every 1,000 grievances in society, only 50 result in a court filing).

clear-eyed decisions. In particular, one might expect that insurers—who litigate constantly—would make rational decisions, or at least more rational decisions than other, less experienced litigants.

Psychological research on litigants' decisionmaking supports the intuition that most litigants fail to evaluate their options in a cool, clear fashion or to select those options that promise the greatest return.² This research reveals that litigants are susceptible to "anchoring" effects;³ that their decisions are influenced by the way options are framed relative to the status quo position;⁴ and that they are inclined to interpret identical facts about cases in ways that support their own positions.⁵

This model of litigant behavior stands in stark contrast to the model that law and economics scholars have proposed. The law and economics model, which is based on rational choice theory, assumes that litigants are rational actors who make outcome-maximizing decisions in litigation.⁶ The psychological model suggests that the purely rational litigant assumed by the law and economics model is an overstatement, if not an outright fiction. According to the psychological account, the assumption of *homo economicus* embedded in the law and economics model should be replaced with the

^{2.} See, e.g., Richard Birke & Craig R. Fox, Psychological Principles in Negotiating Civil Settlements, 4 HARV. NEGOT. L. REV. 1 (1999) (identifying psychological impediments to rational settlement behavior); Jeffrey J. Rachlinski, Gains, Losses, and the Psychology of Litigation, 70 S. CAL. L. REV. 113, 118 (1996) [hereinafter Rachlinski, Gains] (accepting the economic theory's "premise that litigants try to achieve the best possible outcome" but questioning wbether they have the "ability to identify the most favorable options when risk and uncertainty are involved" (emphasis added)).

^{3.} Birke & Fox, supra note 2, at 10.

^{4.} Rachlinski, Gains, supra note 2, at 118.

^{5.} Birke & Fox, *supra* note 2, at 14-15.

^{6.} See, e.g., Robert D. Cooter & Daniel L. Rubinfeld, Economic Analysis of Legal Disputes and Their Resolution, 27 J. ECON. LITERATURE 1067 (1989) (reviewing the law and economics literature on this topic); John P. Gould, The Economics of Legal Conflicts, 2 J. LEGAL STUD. 279 (1973) (using economic theory to explain the resolution of litigation); William M. Landes, An Economic Analysis of the Courts, 14 J.L. & ECON. 61 (1971) (using economic theory to explain litigants' behavior in the criminal justice system); Richard A. Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J. LEGAL STUD. 399 (1973) (using economic theory to explain judicial administration); George L. Priest & Benjamin Klein, The Selection of Disputes for Litigation, 13 J. LEGAL STUD. 1, 4 (1984) ("The most important assumption of the model is that potential litigants form rational estimates..."); Steven Shavell, Suit, Settlement, and Trial: A Theoretical Analysis Under Alternative Methods for the Allocation of Legal Costs, 11 J. LEGAL STUD. 55 (1982) (using economic analysis to explain allocation of legal costs in litigation).

admittedly more complicated, but descriptively more accurate, homo psychologicus.7

But might there be more to the economic model than the latest psychological research suggests? Disputing parties are, after all, not the only actors who make decisions in the litigation process. Lawyers and judges, who might be more objective than the litigants themselves, also play an important role. But lawyers and judges can only do so much to ameliorate the potential foolishness of the litigants who, in the end, must decide how to conduct themselves.⁸ Indeed, lawyers have their own interests, which sometimes compete with those of their clients, and judges might lack sufficient contact with litigants to play a significant role in improving their decisionmaking. Furthermore, both lawyers and judges have been shown to suffer from some of the same kinds of cognitive errors that affect litigants.⁹

But what about insurers? The key stakeholders in litigation—at least on the defense side—are seldom the individual litigants who have been sued. Rather, insurers are the entities who regularly pay not only the cost of defending claims but also any settlement or judgment. Insured parties retain some authority to make substantive litigation decisions, but the practical reality is that insurers drive litigation outcomes.¹⁰

An empirical study conducted by Samuel Gross and Kent Syverud illustrates the important stakeholder role that insurers play in litigation.¹¹ Gross and Syverud analyzed a large sample of

^{7.} See Joseph Persky, The Ethology of Homo Economicus, 9 J. ECON. PERSP. 221, 222 n.3 (1995) (attributing the term homo economicus to VILFREDO PARETO, MANUAL OF POLITICAL ECONOMY (1906), but observing that it might have originated earlier).

^{8.} See, e.g., MODEL RULES OF PROF'L CONDUCT R. 1.2(a) (2002) (providing that "[a] lawyer shall abide by a client's decision whether to settle a matter" and shall "consult with the client as to the means" used); MODEL CODE OF PROF'L RESPONSIBILITY EC 7-7 (1980) (providing that "it is for the client to decide whether he will accept a settlement offer").

^{9.} See Linda Babcock, Henry S. Farber, Cynthia Fobian & Eldar Shafir, Forming Beliefs About Adjudicated Outcomes: Perceptions of Risk and Reservation Values, 15 INT'L. REV. L. & ECON. 289, 296-97 (1995) (finding that framing effects bad a similar impact on lawyer and non-lawyer subjects); Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, Inside the Judicial Mind, 86 CORNELL L. REV. 777 (2001) [hereinafter Guthrie et. al., Inside the Judicial Mind] (presenting empirical evidence that judges rely on many of the same cognitive processes that lead other groups of people astray). But see Russell Korobkin & Chris Guthrie, Psychology, Economics, and Settlement: A New Look at the Role of the Lawyer, 76 Tex. L. Rev. 77, 99-101 (1997) [hereinafter Korobkin & Gutbrie, A New Look] (reporting experimental evidence suggesting that lawyers are less susceptible than non-lawyers to framing effects).

^{10.} See, e.g., HERBERT M. KRITZER, THE JUSTICE BROKER 71, 71-72 (1990) (observing that "most tort defendants are effectively insurance companies" and that it is a "fiction that the tortfeasor rather than the insurer is the defendant").

^{11.} See Samuel R. Gross & Kent D. Syverud, Don't Try: Civil Jury Verdicts in a System Geared to Settlement, 44 UCLA L. Rev. 1, 20-26, 53-56 (1996).

California court cases drawn from *Jury Verdicts Weekly* in 1985-86 and 1990-91.¹² In addition to analyzing case characteristics, they interviewed 735 of the participating attorneys ahout such topics as insurance coverage, fee arrangements, and pretrial bargaining.¹³ They found that "almost all defendants, except some large businesses and most government entities, have insurance that covers the cost of defending the lawsuit and all or some of the potential damages."¹⁴ Seventy-nine percent of large businesses, 91% of small businesses, and 96% of individuals had full or partial coverage.¹⁵

In short, most defendants "are fully insured against any possible verdict, and more have no responsibility for the legal costs of the defense." Indeed, in automobile accident cases, many plaintiffs' lawyers refuse to seek damages beyond the scope of the defendant's insurance coverage. This means that defendants "are financed (and perhaps controlled) by substantial players with long-term positions in the game of litigation." 18

Insurers thus play a critical role in the civil justice system. By providing liability insurance to parties who would otherwise be untenable as defendants, insurers make litigation possible (and profitable) in the first instance. Once the prospect of litigation materializes, insurers play a lead role in financing litigation, providing representation, and resolving the dispute through settlement or trial. Because of the central role insurers play in the civil justice system, any analysis of litigation behavior that ignores them is incomplete.

But is there any reason to believe that insurers behave differently from other actors in the civil justice system? On the one hand, it is conceivable that insurers might make more rational decisions than individual litigants. Unlike most litigants, insurers are highly experienced experts. They are likely to be more knowledgeable

^{12.} Id. at 5.

^{13.} Id. at 6.

^{14.} Id.

^{15.} Id. at 21.

^{16.} Id. at 26.

^{17.} See Tom Baker, Blood Money, New Money and the Moral Economy of Tort Law in Action, 35 LAW & SOC'Y REV. 275, 281-301 (2001) (explaining the various psychological and moral reasons plaintiffs rarely seek damages above policy limits but also observing there are some circumstances in which this is not the case).

^{18.} Gross & Syverud, *supra* note 11, at 26. Gross and Syverud make a similar observation about the plaintiff-side in civil litigation, arguing that plaintiff's lawyers financed on a contingency-fee basis operate much like insurers on the defense side. *Id*.

about litigation¹⁹ and to be more skillful²⁰ than other actors in civil litigation. As "repeat players,"²¹ they receive extensive feedback on the cases they handle. Assuming the feedback they receive is reliable,²² insurers might learn to avoid common errors in judgment. Repeated exposure to similar situations could enable them to develop specialized cognitive processes that ordinary litigants typically do not possess.²³

On the other hand, insurers might not be any better at making decisions in litigation than the rest of us. Although they are repeat players who receive feedback on the cases they handle, that feedback might be unreliable. When insurers settle, they seldom, if ever, learn the true value of the case. Given the limited feedback they receive, they may not be able to devise new and better ways of approaching litigation. Moreover, research indicates that many experts—including doctors,²⁴ real estate agents,²⁵ psychologists,²⁶ and auditors²⁷ (not to

Experienced players rely on subconscious faculties known variously as pattern recognition, visualization, and aesthetic sense. All are forms of educated guesswork—aids to making choices when certainty through exhaustive calculation is impossible—and may be summed up in a word: intuition. Even a novice player uses intuition to exclude most moves as pointless, and the more advanced a player becomes the less he needs to calculate.

More generally, research suggests that "[e]xperts notice features and meaningful patterns of information that are not noticed by novices." HOW PEOPLE LEARN, supra note 19, at 31.

^{19.} See COMMITTEE ON DEVELOPMENTS IN THE SCIENCE OF LEARNING, HOW PEOPLE LEARN: BRAIN, MIND, EXPERIENCE, AND SCHOOL 31 (John D. Bransford et. al. eds., 2000) [hereinafter How People Learn] ("Experts have acquired a great deal of content knowledge that is organized in ways that reflect a deep understanding of their subject matter.").

^{20.} Id. ("Experts are able to flexibly retrieve important aspects of their knowledge with little attentional effort.").

^{21.} See, e.g., KRITZER, supra note 10, at 71 (observing that "the obvious example" of a repeat player is the "liability insurer"). For the classic treatment of repeat players, see Marc Galanter, Why the 'Haves' Come Out Ahead: Speculations on the Limits of Legal Change, 9 LAW & SOCY REV. 95 (1974).

^{22.} Reliable and reliably interpreted feedback might be difficult to find. See, e.g., Hillel J. Einhorn, Learning from Experience and Suboptimal Rules in Decision Making, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 268, 282 (Daniel Kahneman, Paul Slovic & Amos Tversky eds., 1982) [hereinafter JUDGMENT UNDER UNCERTAINTY] (observing that "outcome information, without knowledge of task structure, can be irrelevant for providing self-correcting feedback about poor heuristics" and "knowledge of task structure is difficult to achieve").

^{23.} Consider, for example, expert chess players, who appear to employ specialized approaches. See Gary Klein, The Fiction of Optimization, in BOUNDED RATIONALITY: THE ADAPTIVE TOOLBOX 103, 115-16 (Gerd Gigerenzer & Reinhard Selten eds., 2001) (describing the "progressive deepening" strategy that expert chess players use rather than traditional decision analysis); Tom Mueller, Your Move, THE NEW YORKER, Dec. 12, 2005, at 62, 64, who wrote:

^{24.} See, e.g., Hal R. Arkes, Robert L. Wortmann, Paul D. Saville & Allan R. Harkness, Hindsight Bias Among Physicians Weighing the Likelihood of Diagnoses, 66 J. APPLIED PSYCHOL. 252, 253 (1981) (finding that "physicians exhibited the hindsight bias"); Barbara J. McNeil, Stephen G. Pauker, Harold C. Sox, Jr. & Amos Tversky, On the Elicitation of Preferences for Alternative Therapies, 306 NEW ENG. J. MED. 1259, 1261-62 (1982) (finding that physicians are susceptible to framing effects).

mention lawyers²⁸ and judges²⁹)—make the same kinds of errors that non-experts make.³⁰

In short, there is reason to believe that insurers might behave like *homo economicus*, making litigation decisions in the rational manner assumed by law and economics scholars. But there is also reason to believe that they might behave like *homo psychologicus*, making litigation decisions that deviate from rational choice in the ways psychological research predicts.

This paper represents a step toward understanding how these stakeholders make—or advise their insured parties to make—important judgments and decisions in the litigation process, such as evaluating a case, deciding whether to settle or go forward to trial, and deciding how much to pay to settle a case. As we explain below, insurers, though not entirely immune to the effects of such phenomena as anchoring, make decisions that appear more rational than those we expect from laypersons who lack litigation experience. Our data suggest that insurers might have developed cognitive skills that enable them to avoid many common errors in judgment that appear to plague other actors during the litigation process.

Together with previous research on the decisions that ordinary litigants make, this paper offers a new perspective on suit and settlement. Litigants might embrace skewed or biased perspectives,

^{25.} See, e.g., Gregory B. Northcraft & Margaret A. Neale, Experts, Amateurs, and Real Estate: An Anchoring-and-Adjustment Perspective on Property Pricing Decisions, 39 Organizational Behav. & Hum. Decision Processes 84, 95-96 (1987) (reporting that real estate agents fall prey to anchoring effects when estimating real estate prices).

^{26.} See, e.g., Hal R. Arkes, David Faust, Thomas J. Guilmette & Kathleen Hart, Eliminating the Hindsight Bias, 73 J. APPLIED PSYCHOL. 305, 306-07 (1988) (demonstrating that psychologists exhibit the hindsight bias); Loren J. Chapman & Jean P. Chapman, Illusory Correlation as an Obstacle to the Use of Valid Psychodiagnostic Signs, 74 J. ABNORMAL PSYCHOL. 271, 271 (1969) (demonstrating the impact of heuristics on psychotherapists); Amos Tversky & Daniel Kahneman, Belief in the Law of Small Numbers, 76 PSYCHOL. BULL. 105, 105 (1971) (showing that psychologists over-rely on representativeness and underestimate the impact of sample sizes).

^{27.} See, e.g., John C. Anderson, D. Jordan Lowe & Philip M.J. Reckers, Evaluation of Auditor Decisions: Hindsight Bias Effects and the Expectation Gap, 14 J. ECON. PSYCHOL. 711, 727 (1993) (noting that auditors are influenced by hindsight bias).

^{28.} See, e.g., Babcock et al., supra note 9, at 296-97 (finding that framing effects had a similar impact on lawyer and non-lawyer subjects). But see Korobkin & Guthrie, A New Look, supra note 9, at 99-101 (reporting experimental evidence suggesting that lawyers are less susceptible than non-lawyers to framing effects).

^{29.} See, e.g., Guthrie et. al., Inside the Judicial Mind, supra note 9, at 784, 816 (finding generally that judges are susceptible to cognitive biases, though somewhat less susceptible to framing effects and representativeness than novices).

^{30.} See generally Scott Plous, The Psychology of Judgment and Decision Making 258 (1993) ("[S]everal studies have found that experts display either roughly the same biases as college students or the same biases at somewhat reduced levels." (citations omitted)).

but they are often advised or even directed by insurers, whose assessments of litigation options are more likely to be rational. This finding casts new light on litigation theory and practice.

II. THE STUDY

To study insurer behavior in litigation, we developed questionnaires³¹ designed to explore whether insurers use three "heuristics"³² that have been shown to create problems in suit and settlement: anchoring (the tendency to rely too heavily on initial figures when making numeric estimates), framing (the tendency to see losses differently from gains), and self-serving bias (the tendency to make assessments of ambiguous facts that would, if true, favor one's

Initially, Tversky and Kahneman identified three basic heuristics: representativeness, availability, and anchoring. *Id.* at 1124, 1127, 1128. More recently, Kahneman, and his collaborator Shane Frederick, have argued that the three basic heuristics are representativeness, availability, and the affect heuristic. Kahneman & Frederick, *supra*, at 53 ("It has become evidence that an *affect heuristic* should replace anchoring in the list of major general-purpose heuristics."). *But see* Daniel T. Gilbert, *Inferential Correct, in HEURISTICS, supra*, at 167 (arguing that anchoring and adjustment "describes the process by which the human mind does virtually all of its inferential work.").

Even though these are recognized as the major, general-purpose heuristics, most decision researchers use the term "heuristics and biases" loosely to include several mental shortcuts that decisionmakers are likely to employ. See, e.g., HEURISTICS, supra (containing articles describing several different phenomena); JUDGMENT UNDER UNCERTAINTY, supra note 22 (same). Likewise, in recent years, legal scholars have defined "heuristics and biases" broadly when applying them to law and legal behavior. See Jeffrey J. Rachlinski, The Uncertain Psychological Case for Paternalism, 97 NW. U. L. REV. 1165, 1170-73 (2003) (observing that legal scholars have focused most of their attention on five different heuristics). For applications of many heuristics and biases to law, see Christine Jolls, Cass R. Sunstein & Richard R. Thaler, A Behavioral Approach to Law and Economics, 50 STAN. L. REV. 1471 (1998); Russell B. Korobkin & Thomas S. Ulen, Law and Behavioral Science: Removing the Rationality Assumption from Law and Economies, 88 CAL. L. REV. 1051 (2000); Donald C. Langevoort, Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review, 51 VAND. L. REV. 1499 (1998).

^{31.} We focus in this paper on those questions that elicit information about the manner in which insurance experts make litigation decisions; in another paper, we focus on the manner in which insurance executives evaluate risk. See Jeffrey J. Rachlinski & Chris Guthrie, Information-Processing Asymmetry: Risk, the Representativeness Heuristic, and Expert Judgment (Jan. 22, 2006) (unpublished manuscript, on file with the authors).

^{32.} Amos Tversky and Daniel Kahneman introduced the "heuristics and biases" research program in a famous article in Science. See Amos Tversky & Daniel Kahneman, Judgment Under Uncertainty: Heuristics and Biases, 185 SCI. 1124, 1124 (1974) [hereinafter Tversky & Kahneman, Heuristics and Biases] (describing heuristics and biases in judgment). See also Daniel Kahneman & Shane Frederick, Representativeness Revisited: Attribute Substitution in Intuitive Judgment, in HEURISTICS AND BIASES 49, 49 (Thomas Gilovich, Dale Griffin & Daniel Kahneman eds., 2002) [hereinafter HEURISTICS] (dating the heuristics and biases program to meetings of the Mathematical Psychological Society and the American Psychological Association in 1969). According to Tversky and Kahneman, "people rely on a limited number of heuristic principles which reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations." Tversky & Kahneman, Heuristics and Biases, supra, at 1124.

position). Heuristics, such as anchoring, framing, and self-serving bias, are cognitive shortcuts that decisionmakers employ to make decisions in a "fast and frugal" manner.³³ Often, heuristics are adaptive, leading to good decision outcomes;³⁴ other times, however, they can lead people astray.³⁵

A. Methodology

We recruited three groups of employees working in the insurance industry-189 in total-to participate in our study. The first group included forty-four insurance claims adjusters attending a conference sponsored by General ColognRE, a prominent reinsurance company, in Stamford, Connecticut in November 2000. The second group consisted of eighty-six attendees at the annual conference of the Association \mathbf{of} America held Reinsurance in Philadelphia. Pennsylvania in May 2001. The attendees were officers and managers at reinsurance companies located in the United States and Europe, including some chief executive officers and chief operating officers from major reinsurance companies. The third group included forty insurance professionals and nineteen insurance industry lawyers attending a conference on dispute resolution in Kansas City, Missouri in November 2002.36

The participants had extensive experience in the insurance industry. The claims adjusters in Connecticut had an average of 20.6 years of experience. Although the group included one person who was new, 90.8% had ten or more years of experience. Likewise, the Missouri insurers had an average of 19.2 years of experience. The group included a couple of novices, but 84% of the group members had ten or more years of experience. The reinsurers similarly had, on average, 19.4 years of experience. Although this group included two

^{33.} See id. Gerd Gigerenzer is the scholar most closely associated with the "fast and frugal" heuristics school of thought. See, e.g., Gerd Gigerenzer & Peter M. Todd, Fast and Frugal Heuristics: The Adaptive Toolbox, in SIMPLE HEURISTICS THAT MAKE US SMART 3 (Gerd Gigerenzer, Peter M. Todd & The ABC Research Group eds., 1999) [hereinafter SIMPLE HEURISTICS].

^{34.} See generally Tversky & Kahneman, Heuristics and Biases, supra note 32, at 1124 ("In general, these heuristics are quite useful."). For more on the adaptive properties of heuristics, see generally SIMPLE HEURISTICS, supra note 33.

^{35.} See generally Kahneman & Frederick, supra note 32, at 53 (observing that reliance on heuristics "introduces systematic biases"); Tversky & Kahneman, Heuristics and Biases, supra note 32, at 1124 (observing that the heuristics "sometimes lead to severe and systematic errors").

^{36.} Because nine of the fifty-nine participants were not involved in the claims settlement process, we exclude them from consideration in this paper, focusing instead on the claims adjusters and insurance lawyers.

novices, and a handful of less experienced members, 84% of them had ten years of experience or more.³⁷

We used the same methods with each group. At each of the conferences, we distributed questionnaires to the participants and asked them to read and respond to several questions,³⁸ assuming that they were willing to do so.³⁹ We did not ask for any identifying information, so all responses were anonymous. Moreover, we gave participants the opportunity to exclude their responses from our study,⁴⁰ but none of them chose to do so.

B. Results

The insurance professionals demonstrated an impressive ability to resist the problems that heuristics can cause. Although we found some evidence that anchoring can influence insurer judgments, the weight of the evidence reported below suggests that insurers behave more like homo economicus than homo psychologicus.

^{37.} The degree of experience among the participants in our research thwarted our efforts to study one important aspect of our hypothesis. If experience in the insurance industry produces better judgment, then experience should correlate with smaller effects of misleading heuristics. We had too few inexperienced participants to test this hypothesis in any meaningful way.

^{38.} Each of the two insurance groups evaluated five items, and the reinsurance group evaluated eight items (although two of the items were only presented to half of the participants each). Specifically, the first insurance group evaluated items involving: framing effects, representativeness (two items), anchoring, and the self-serving bias. The second insurance group evaluated items concerning: framing effects (two items), representativeness, anchoring, and the self-serving bias. The reinsurance group evaluated items concerning: framing effects (2 items), representativeness (three items), contrast effects, anchoring, and the self-serving bias.

^{39.} The instructions read as follows:

Many of the points discussed at the following presentation are best understood if experienced directly. We therefore ask that you read and respond to each of the questions enclosed in this survey (although doing so is voluntary, of course). Please do so independently and please do not discuss the surveys with others while you are responding to the questions. We shall collect these surveys before the discussion and present the results during the upcoming session

^{40.} To illustrate, the last page of the materials used at the Reinsurance conference included the following paragraph:

Please note: This survey is designed primarily to illustrate decisionmaking issues involving risk that will he discussed tomorrow. The results will be presented in aggregate form during the discussion. The presenter (Professor Rachlinski), however, would also like the opportunity to comment respectfully on the aggregate results of this survey at other public presentations and possibly in published works. In no way will individual participants be identified as part of any discussion of the results of this survey. (Identifying information is not even being collected.) If, for any reason, you object to the use of the results of this survey in any forum other than the present panel, please indicate so hy circling this paragraph and your survey will be removed from any further analysis or discussion.

1. Anchoring

When people make numerical estimates, they commonly rely on the initial value available to them, which provides a starting point that "anchors" the estimation process. 41 People generally adjust away from the initial anchor, but their adjustment is often insufficient, giving the initial anchor greater influence on the final estimate than is appropriate. That is, "the number that starts the generation of a judgment exerts a stronger impact than do subsequent pieces of numeric information."42

The powerful effect that anchors have on judgment is perhaps best illustrated by the initial demonstration of the phenomenon. In the original anchoring study, Amos Tversky and Daniel Kahneman spun a "wheel of fortune" that they had rigged to stop at ten or sixty-five. They asked subjects, some of whom saw the wheel stop at ten and others of whom saw the wheel stop at sixty-five, whether the percentage of African countries in the United Nations was higher or lower than the number on the wheel. They then asked subjects to estimate the percentage of African countries in the United Nations. They found that the number on the wheel, which was obviously unrelated to the percentage of African nations in the United Nations, had a dramatic impact on the subjects' estimates. When the wheel landed on ten, subjects estimated that 25% of African countries were members of the United Nations; when the wheel landed on sixty-five, however, subjects estimated that number at 45%.44

Anchoring might influence judgment in several ways. First, and most simply, anchoring might influence judgment because decisionmakers are uncertain about the correct estimate and treat an anchor as a reliable guide. Anchoring might also arise from cognitive laziness; decisionmakers simply fail to adjust their final estimates away from the initial anchors because doing so requires an effortful cognitive investment that they are unwilling to make. Anchoring

^{41.} Amos Tversky and Daniel Kahneman identified anchoring-along with availability and representativness-in their classic article in SCIENCE. Tversky & Kahneman, *Heuristics and Biases*, supra note 32, at 1128-30.

^{42.} Fritz Strack & Thomas Mussweiler, Heuristic Strategies for Estimation Under Uncertainty: The Enigmatic Case of Anchoring, in FOUNDATIONS OF SOCIAL COGNITION: A FESTSCHRIFT IN HONOR OF ROBERT S. WYER, JR. 79, 80 (Galen V. Bodenhausen & Alan J. Lambert eds., 2003).

^{43.} Tversky & Kahneman, Heuristics and Biases, supra note 32, at 1128.

^{44.} Id.

^{45.} See, e.g., Strack & Mussweiler, supra note 42, at 80-81.

^{46.} See, e.g., Gretchen B. Chapman & Eric J. Johnson, Incorporating the Irrelevant: Anchors in Judgments of Believe and Value, in HEURISTICS, supra note 32, at 120, 127, where Chapman and Johnson wrote:

might serve to "prime" people to think about the anchor as an estimate, making it a focal point that guides the estimation process.⁴⁷ Finally, anchoring might influence judgment by prompting decisionmakers to entertain the prospect that the anchor is accurate and then causing them to marshal evidence consistent with the anchor.⁴⁸ Regardless of the underlying explanation, anchoring is a powerful phenomenon.

Anchoring seems likely to influence insurers in the litigation process because insurers are constantly confronted with a highly salient anchor—the policy limit included in the liability policy at issue. When informed of a claim against an insured party, the insurer must attempt to value the claim to determine how much to pay to settle the dispute. If an insurer determines that a claim against the defendant is likely to be successful and likely to exceed the policy limit, ⁴⁹ the cheapest and most effective way of dealing with the claim is to try to settle the case for the policy limit. But even if the insurer deems the value of the claim to fall well short of the policy limit, the policy limit itself might serve to anchor the insurer's estimate of the appropriate settlement amount. That is, an insurer might value the very same claim differently depending upon whether the cap on the insured's liability policy is \$250,000 or \$1,000,000.

Indeed, in an analogous setting, researchers have found that statutory damage caps in tort suits can influence mock jurors' assessments of the appropriate amount of damages to award. In one study, 50 Jennifer Robbennolt and Christina Studebaker presented mock jurors with a case involving a plaintiff who had developed HIV through a blood transfusion. The mock jurors learned that the plaintiff had sued the company that had provided the infected blood, asserting that it had engaged in irresponsible testing practices. The researchers asked the mock jurors to indicate how much they would award the plaintiff in compensatory and punitive damages after telling them that the jurisdiction imposed either a \$100,000, \$5 million, or \$50

Anchoring effects have most often been explained in conjunction with the idea of insufficient adjustment away from the anchor. The name anchoring and adjustment implies a particular cognitive process whereby decisionmakers first focus on the anchor and then make a series of dynamic adjustments toward their final estimate. Because these adjustments are insufficient, the final answer is hiased toward the anchor.

^{47.} Strack & Mussweiler, supra note 42, at 83-84.

^{48.} Id. at 81, 83.

^{49.} The real "value" of a claim, of course, would account for both the magnitude of the claim and the likelihood that the claimant will successfully recover.

^{50.} See Jennifer K. Robbennolt & Christina A. Studebaker, Anchoring in the Courtroom: The Effects of Caps on Punitive Damages, 23 LAW & HUM. BEHAV. 353 (1999).

million cap on punitive damages. The researchers found that the punitive damage caps anchored the subjects' assessments of both compensatory and punitive damages.⁵¹ For example, subjects in the \$100,000 condition awarded \$1,518,100 on average, while subjects in the \$50 million condition awarded \$22,642,417 on average.⁵²

Like mock jurors influenced by damage caps, insurers might very well be influenced by policy caps. If policy caps influence the way insurers value claims, they are likely to influence the way insurers negotiate. In previous research, scholars have found just that; there is demonstrating anchoring evidence that negotiation and settlement. In one illustrative study, Russell Korobkin and Chris Guthrie presented student-subjects with a hypothetical case involving a defective automobile and asked the subjects to respond to a \$12,000 final settlement offer.⁵³ For some of the subjects, the final offer followed an opening offer of \$2000; for other subjects, the final offer followed an opening offer of \$10,000.54 The researchers found that subjects in the former group were more likely to settle than those in the latter group.55 They reasoned that those subjects who had received the initial \$2000 settlement offer expected to settle the case for a relatively small amount, so the \$12,000 final settlement offer seemed generous by comparison. But those who received the \$10,000 opening offer expected to settle for relatively more, so the \$12,000 final settlement offer seemed stingy.⁵⁶ They concluded that the opening offers "anchored subjects' expectations" and influenced their settlement behavior.57

More generally, in a recent meta-analysis of studies involving simulated negotiations, Dan Orr and Chris Guthrie found that anchors have a significant influence on negotiation outcomes.⁵⁸ Specifically, they found a .497 correlation between the initial anchor and the outcome of the negotiation, suggesting that an anchor accounts for approximately 25% of the variance among negotiation outcomes.⁵⁹

^{51.} Id. at 357.

^{52.} Id. at 359.

^{53.} Russell Korobkin & Chris Guthrie, Opening Offers and Out-of-Court Settlement: A Little Moderation May Not Go a Long Way, 10 OHIO St. J. ON DISP. RESOL. 1, 12 (1994) [hereinafter Korobkin & Guthrie, Opening Offers].

^{54.} Id. at 13.

^{55.} Id.

^{56.} Id. at 19.

^{57.} Id.

^{58.} Dan Orr & Chris Guthrie, Anchoring, Information, Expertise, and Negotiation: New Insights from Meta-Analysis, 21 OHIO St. J. ON DISP. RESOL. 597, 598 (2006).

^{59.} Id. at 621-22.

To test for the effects of anchoring among insurers, we conducted two studies: one involving the Missouri insurers and the other involving the reinsurance executives.⁶⁰

a. Anchoring Study #1

To assess the impact of the policy limit as an anchor, we asked participants at the Missouri conference to analyze a scenario involving an automobile accident. We presented participants with one of two versions, each with a different policy limit: \$150,000 or \$500,000. The scenario, entitled "Case Settlement Evaluation," provided as follows:

Suppose you are advising an insurance company client on a claim. The insurer has asked you for a settlement recommendation in the following case:

The insurer sold an auto insurance policy to a small package-delivery company. The policy provided a [\$150,000/\$500,000] limit on liability for each driver. Unfortunately, one of the drivers, named Dale, was recently involved in an automobile accident involving a 25-year-old graduate student named Perry. Dale's truck sideswiped Perry's car on a wet, spring morning. As a result of the accident, Perry broke three ribs and his right arm. He spent two days in the hospital and missed three weeks of classes. Fortunately, he has fully recovered from his physical injuries. However, he claims to be suffering from recurring nightmares, "day sweats," and other "episodes of anxiety" as a result of the accident.

The parties have stipulated that the accident was caused solely by Dale's negligent driving. Thus, the only issue in the lawsuit is the amount of damages the insurer should pay pursuant to the liability policy. Trial is imminent. ⁶¹

We then asked the participants, "Based solely on the facts presented, would you recommend the insurer pay the full [\$150,000/\$500,000] policy limit to settle the case?" Finally, we followed up with this question: "If no, what is the maximum amount you would recommend the insurer pay to settle the case?" 63

None of the participants in either condition agreed to settle for the policy limit. Even so, and even though three of the participants in the high policy cap group believed the claim was worth more than the lower policy cap (\$150,000),64 the policy cap affected the awards. As Table 1 shows, the mean award in the low-anchor condition was

^{60.} We also presented a scenario to the Connecticut insurers, but our anchors proved to be much too low, and the vast majority of the participants produced awards greater than the low anchor condition. This obscured any meaningful analysis of the effects of the anchors. This scenario nevertheless provided the basis for the subsequent two studies, by giving us a sense of what insurers felt the underlying claims were worth.

^{61.} Stimulus materials on file with the authors.

^{62.} Id.

^{63.} Id.

^{64.} None of the subjects in the low-anchor group believed this, and only three subjects in the high-anchor group did.

\$51,111, as opposed to \$79,352 in the high-anchor condition. In effect, the policy cap increased the award by \$28,241, or 55.2%. This difference was statistically significant.⁶⁵ Because the awards were somewhat positively skewed, we also compared the responses of the two groups using a non-parametric test, and the difference between them remained significant.⁶⁶

Table 1: Mean, Quartiles, and Sample Size by Condition, in Dollars

Condition	Mean	Median	1st Quartile	3 rd Quartile	N
Low anchor	51,111	50,000	35,000	60,000	29
High Anchor	79,352	60,000	50,000	100,000	22

These results strongly suggest that the policy limit operated as an anchor. The pattern of results reported in Table 1 demonstrates that the entire distribution of awards shifted upwards in the highanchor condition. It is possible that the insurers were acting appropriately, even "rationally," in incorporating the policy limit into their assessment of the claim. Given that insurers do not have to pay any amount over the policy limit, the insurers might have adjusted their assessments of the claim's value to account for the possibility that the award might ultimately exceed the policy limit. For example, suppose the insurer believed that a jury would award the plaintiff either \$100,000 or \$250,000 (with an equal probability of each) and that the insured had a \$200,000 cap on his liability policy. The expected jury award would be \$175,000 (i.e., 50% x \$100,000 + 50% x \$250,000 = \$175,000), but the expected insurance payout would be only \$150,000 (i.e., $50\% \times $100,000 + 50\% \times $200,000 = $150,000$ expected insurance payout). If the policy limit were higher, say \$500,000, then the expected insurance payout would rise to equal the expected jury award of \$175,000 (i.e., 50% x \$100,000 + 50% x \$250,000 = \$175,000). Thus, it is conceivable that the insurers responding to this problem were rationally accounting for the policy limit rather than irrationally relying on it as an anchor.

We are skeptical of this account, however, because the data do not support it. The high policy cap had a large effect on the award-increasing it by over \$28,000, or 55.2%. To produce that large an effect, the insurers would have had to think it fairly likely that a jury would award more than \$150,000, yet only three (out of twenty-two)

^{65.} t(47) = .008. All statistical tests reported in this paper are two-tailed.

^{66.} Mann-Whitney, p = .018.

insurers in the high policy cap group expressed a willingness to settle for more than \$150,000 (for \$250,000, \$200,000 and \$175,000). Thus, if anchoring had had no effect, and the \$500,000 cap condition provided unconstrained estimates of the appropriate settlement, the \$150,000 policy cap would have curtailed the awards of 13.6% (3 out of 22) of the insurers, by an average of \$58,333,33 (the average amount by which the three high awards in the \$500,000 condition exceeded the \$150,000 amount). Absent the anchoring effect then, the expected effect of the \$150,000 policy cap would have been to increase awards by \$7,933 (13.6% times \$58,333.33), which is far less than the actual increase we observed. It is true that jury awards can be erratic, but perhaps because insurers know that erratic awards are often overturned on appeal, 67 the potential for a markedly high award in the high-anchor condition did not seem to have much effect on the insurers. Furthermore, Table 1 shows that the whole range of awards was affected.

b. Anchoring Study #2

We presented a similar scenario to the reinsurance executives. Because of the nature of reinsurance, we cast the participants as advisors to a small insurance company, used much higher anchors, and described much more serious injuries. The scenario, entitled "Case Settlement Evaluation," provided as follows:

Suppose you are advising a small insurance company on its claims settlement process. The insurer has asked you for a settlement recommendation in the following case:

The insurer sold an auto insurance policy with a [\$750,000/\$2 million] limit on liability coverage to an individual named David Devine, who injured a pedestrian named Paula Peters in an auto accident. While approaching an intersection, Devine negligently failed to brake his car soon enough and inadvertently hit Peters while she was in the crosswalk. Devine was not driving very fast at the time, but Peters still incurred some injuries. A wife, mother, and homemaker in her early forties, Peters suffered a broken leg, a broken arm, and a concussion. All of her injuries eventually healed completely; her leg and arm healed naturally after five weeks, but the concussion had lingering effects, including occasional headaches and bouts of dizziness that lasted for three months. The lawyer representing Devine and the insurer has informed you that Devine's liability is clear and that the only issue is the liability payment the insurer will pay Peters pursuant to the policy. 68

^{67.} See Theodore Eisenberg, Damage Awards in Perspective: Behind the Headline-Grabbing Awards in Exxon Valdez and Engle, 36 WAKE FOREST L. REV. 1129, 1131, 1141 (2001) (noting that punitive awards that far exceed compensatory awards are likely to be overturned).

^{68.} Stimulus materials on file with the authors.

The materials then explain: "Trial is imminent. Based solely on the facts above, what is the most that you would suggest the insurer be willing to pay to settle the case and avoid trial?"69

The results, depicted in Table 2, show that the policy limit had little impact on the reinsurers' evaluations. Among the low-anchor participants, 20.9% (nine out of forty-three) recommended settling for the policy limit of \$750,000; likewise, among the high-anchor participants, 18.4% (seven out of thirty-eight) recommended settling for more than \$750,000. The difference in the mean responses between the two groups was not statistically significant, although the trend is in the direction that we predicted. 70 Because the data are skewed, we transformed them using a logarithmic transformation to approximate a normal distribution; the transformed data revealed no trend. 71 We also tested for significance on the untransformed data using a nonparametric test and found no difference between the two groups. 72 As can be seen in Table 2, the distribution of the awards does not display the shift observed in the prior study. The trend observed in the raw data is therefore likely the product of a couple of aberrantly high awards in the high-anchor condition. Thus, these results suggest that the reinsurers resisted the influence of anchoring on their judgments.

Table 2: Mean, Quartiles, and Sample Size by Condition, in Dollars

Condition	Mean	Median	1 st quartile	3 rd quartile	N
Low Anchor	297.4	150	100	500	43
High Anchor	443.3	250	100	500	38

To be sure, our sample size was limited, and might have been too small to detect an anchoring effect. Anchoring, however, commonly produces effects large enough that we would have been likely to uncover a significant effect. In fact, had the true effect of anchoring in this study been equivalent to 0.8 standard deviations (akin to the effect we observed in the first study of anchoring), we would have had a 94.4% chance of detecting a significant effect with this sample size.

^{69.} Id.

^{70.} t(30) = 1.48, p=.14.

^{71.} t(79) = 0.63, p = .53.

^{72.} Mann-Whitney U=1682.5, p=.44.

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c. Summary of Anchoring Studies

Anchoring is a widely replicated phenomenon, even when the research subjects are professionals.⁷³ Indeed, several studies show that truly preposterous anchors influence judgment. In one study, for example, subjects estimated that the average temperature in San Francisco was higher after first being asked whether it was higher or lower than 558 degrees.⁷⁴ Likewise, in another study, subjects estimated that the price of a college textbook was higher after first being asked if it was higher or lower than \$7,128.53.⁷⁵ Our work suggests that insurers may be less likely than others to be influenced by anchors. Insurers are not impervious to the effects of anchoring, as the first study demonstrates, but they seem better able than most to resist anchoring's pull, as the second study demonstrates. Further work might identify exactly what circumstances trigger the anchoring effect in insurers and thereby determine how it is that insurers appear able to avoid its influence.

2. Framing Effects

People tend to evaluate decision options relative to a reference point, generally the status quo. When choosing between options that appear to be gains relative to that reference point, people tend to make risk-averse decisions;⁷⁶ when choosing between options that look like losses, people tend to make risk-seeking or risk-preferring decisions.⁷⁷ For example, people will generally choose a \$500 prize over a 50% chance at winning a \$1000 prize, but will prefer a 50%

^{73.} See, e.g., sources cited supra notes 24-30.

^{74.} See PLOUS, supra note 30, at 146 (citing an unpublished study by George Quattrone and colleagues).

^{75.} Id.

^{76.} See, e.g., Amos Tversky & Daniel Kahneman, Advances in Prospect Theory: Cumulative Representation of Uncertainty, 5 J. RISK & UNCERTAINTY 297, 306 (1992) [hereinafter Tversky & Kahneman, Advances] ("For the nonmixed prospects used in the present study, 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 higb probability."). "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, The Theory of Risk Aversion, in ESSAYS IN THE THEORY OF RISK-BEARING 90, 90 (1971).

^{77.} See, e.g., Tversky & Kahneman, Advances, supra note 76, at 306 (finding "risk-averse and risk-seeking preferences, respectively, for gains and for losses of moderate or high probability"). A risk-seeker will reject "a sure thing in favor of a gamble of lower or equal expectation." Daniel Kahneman & Amos Tversky, Choices, Values, and Frames, 39 AM. PSYCHOLOGIST 341, 341 (1984) [hereinafter Kahneman & Tversky, Choices].

chance at having to pay a \$1000 fine over paying a certain \$500 fine.⁷⁸ These choices contrast with rational choice theory, which generally assumes that people exhibit consistently risk-neutral or risk-averse choices when confronted with either gains or losses.⁷⁹ Framing theory, by contrast, predicts that the characterization of options as gains or losses will induce different decisions.⁸⁰

Litigation often creates a natural frame.⁸¹ In ordinary lawsuits,⁸² plaintiffs generally choose either to accept a certain settlement offer from the defendant or to proceed to trial in hopes of obtaining a more favorable outcome. Most defendants, by contrast, generally choose either to pay a certain settlement amount to the plaintiff or to gamble that further litigation will reduce the amount they must pay. Thus, plaintiffs generally choose between options that appear to them to be gains, while defendants generally choose

^{78.} Note that these risk preferences tend to shift when people confront low-probability gains and losses. That is, people tend to make risk-seeking choices when selecting between options that appear to be low-probability gains and risk-averse choices when selecting between options that appear to be low-probability losses. For example, when choosing between a definite \$25 prize and a 5% chance at winning a \$500 prize, people tend to make the risk-seeking choice by opting for the gamble. When choosing between paying a certain \$25 fine and facing a 5% chance at having to pay a \$500 fine, people tend to make the risk-averse choice by opting to make the certain, small payment. See Tversky & Kahneman, Advances, supra note 76, at 306 (finding that "the shape of the weighting functions favors risk seeking for small probabilities of gains and risk aversion for small probabilities of loss, provided the outcomes are not extreme").

^{79.} See, e.g., Rachlinski, Gains, supra note 2, at 121 (observing that "[e]xpected utility theory predicts that people make either risk-averse or risk-neutral choices").

[&]quot;Framing theory" is derived from "prospect theory," a descriptive decision theory developed by Daniel Kahneman and Amos Tversky. See Daniel Kahneman & Amos Tversky, Prospect Theory: An Analysis of Decision Under Risk, 47 ECONOMETRICA 263 (1979) (presenting "prospect theory" as an alternative model to "expected utility theory"). For additional work by Kahneman and Tversky on prospect theory, see Kahneman & Tversky, Choices, supra note 77 (discussing the determinants of choice); Daniel Kahneman & Amos Tversky, The Psychology of Preferences, 246 SCI. Am., Jan. 1982, at 160 (1982) (reporting experimental evidence suggesting people's risk seeking behavior follows mathematical patterns); Tversky & Kahneman, Advances, supra note 76 (extending prospect theory to uncertain and risky prospects); Amos Tversky & Daniel Kahneman, The Framing of Decisions and the Psychology of Choice, 211 Sci. 453 (1981) [hereinafter Tversky & Kahneman, Framing] (tracing inconsistencies and incoherence in decisionmaking to the perception of decision and the evaluation of options); Amos Tversky & Daniel Kahneman, Loss Aversion in Riskless Choice: A Reference-Dependent Model, 106 Q.J. ECON. 1039 (1991) (presenting a reference-dependent theory of consumer choice); Amos Tversky & Daniel Kahneman, Rational Choice and the Framing of Decisions, 59 J. BUS. (BEHAVIORAL FOUNDATIONS OF ECONOMIC THEORY SUPPLEMENT) S251, S257-60 (1986) (arguing that the logic of choice does not adequately provide for a descriptive theory of decisionmaking).

^{81.} Rachlinski, Gains, supra note 2, at 129.

^{82.} This pattern tends to reverse in frivolous or low-probability suits. See Chris Guthrie, Framing Frivolous Litigation: A Psychological Theory, 67 U. CHI. L. REV. 163 (2000) (claiming that, in frivolous or low-probability litigation, plaintiffs tend to be relatively more risk seeking than defendants).

between options that appear to them to be losses.⁸³ The framing theory predicts that plaintiffs will often prefer settlement, i.e., the risk-averse option, while defendants will be relatively more attracted to trial, i.e., the risk-seeking option.⁸⁴

To test for this phenomenon, Jeffrey Rachlinski presented a simple copyright litigation problem to law students assigned to either a plaintiff group or a defendant group.85 Rachlinski asked all of the subjects to decide whether they would settle for some certain amount or go forward to trial. The plaintiff-subjects were asked to decide whether they would accept a \$200,000 settlement offer or to go to trial, where they faced a 50% chance of winning the \$400,000 that the defendant had earned from the allegedly copyright-protected materials (and a 50% chance of winning nothing). The defendantsubjects were asked to decide whether they would pay \$200,000 to settle the case or go to trial, where they faced a 50% chance of losing \$400,000 and a 50% chance of losing nothing. In this simple litigation problem, the plaintiff-subjects thus faced a choice between two identical expected values: a certain \$200,000 settlement or an expected trial verdict valued at \$200,000 (i.e., (50% x \$400,000) + (50% x \$0 = \$200,000). Like the plaintiff-subjects, the defendant-subjects faced a choice between two options with identical expected values: a certain \$200,000 settlement payment to plaintiff or an expected trial verdict valued at -\$200,000 (i.e., $(50\% \times -$400,000) + (50\% \times $0) = -$ \$200,000). The parties were essentially disputing over the right to \$400,000; the status quo of the defendant as the stakeholder created the frame.

^{83.} Rachlinski, Gains, supra note 2, at 118-19.

^{84.} See id. at 118-19 (applying Kahneman and Tversky's framing theory of decisionmaking to litigation). For more work on framing in litigation, see ROBIN M. HOGARTH, JUDGEMENT AND CHOICE 105 (2d ed. 1987) [hereinafter HOGARTH, JUDGMENT AND CHOICE] (illustrating parties' choices in a lawsuit); Babcock et al., supra note 9, at 289-90, 293-97, 300-01 (examining how damages awarded in products liability cases shaped negotiators' beliefs about their own, similar cases); Robin M. Hogarth, Ambiguity and Competitive Decision Making: Some Implications and Tests, 19 ANNALS OPERATIONS RES. 31, 38-41 (1989) [hereinafter Hogarth, Ambiguity and Competitive Decision Making] (examining the role of uncertainty in the decisions made by litigants); Korobkin & Guthrie, A New Look, supra note 9 (reporting experimental evidence suggesting that lawyers are less susceptible than non-lawyers to framing effects); Russell Korobkin & Chris Guthrie, Psychological Barriers to Litigation Settlement: An Experimental Approach, 93 MICH. L. REV. 107, 129-42 (1994) [hereinafter Korobkin & Guthrie, Psychological Barriers] (discussing the effects of framing on decisions to settle litigation); Peter J. van Koppen, Risk Taking in Civil Law Negotiations, 14 LAW & HUM. BEHAV. 151 (1990) (finding strong experimental support for the hypothesis that parties who expect to win at trial tend to be risk averse and parties expecting to lose risk seeking, and some experimental support for the hypothesis that plaintiffs tend to be risk averse and defendants risk seeking).

^{85.} Rachlinski, Gains, supra note 2, at 128-29.

Because they faced options with identical expected values, economic theory would predict that both plaintiff- and defendant-subjects would either be indifferent between the two options (assuming risk neutrality) or would express a preference for settlement (assuming risk aversion). Consistent with framing theory, however, Rachlinski found that 77% of the plaintiff-subjects preferred settlement, while only 31% of the defendant-subjects preferred settlement. Thus, the defendant-subjects, choosing between options that appeared to be losses, were inclined to take risks that the economic theory would not have predicted. In this and other studies, researchers have found substantial support for this pattern of decisionmaking in ordinary civil cases among both non-lawyer-subjects. and even among some lawyer-subjects.

To test whether insurance-industry employees could avoid the influence of framing, we gave them three different scenarios involving suit and settlement. As consummate repeat players in litigation, insurance employees might be able to avoid the lure of framing effects when evaluating litigation options. For an insurance company, all lawsuits involve losses; indeed, the entire claims process involves making payments, and hence, losing. Thus, for insurance companies, paying on a claim is not a unique experience that inspires the anxiety about losing that induces most people to make risk-seeking choices in the face of losses; it is simply part of the cost of doing business. As a consequence, insurers might evaluate these prospective losses more rationally than most defendants.

a. Framing Study #1

We presented a simple scenario to the insurance claims adjusters at the Missouri conference that was similar to the scenario that Rachlinski presented to law students.⁸⁹ The version used here,

^{86.} Id.

^{87.} See, e.g., Babcock et al., supra note 9, at 296-97 (finding a framing effect among non-lawyer-subjects participating in their study); Hogarth, Ambiguity and Competitive Decision Making, supra note 84, at 39-41 (reporting experimental results among non-lawyer-subjects consistent with the framing theory when subjects were given non-ambiguous cues as to the probability of their success at trial); Korobkin & Guthrie, Psychological Barriers, supra note 84, at 130-42 (finding that the framing of a settlement offer made a significant difference in whether non-lawyer-subjects accepted the offer); Rachlinski, Gains, supra note 2, at 135-44 (same); van Koppen, supra note 84, at 158-64 (same).

^{88.} See, e.g., Babcock et al., supra note 9, at 296-97 (reporting that, among lawyer-subjects in their study, plaintiffs tended to be risk averse and defendants risk seeking). But see Korobkin & Guthrie, A New Look, supra note 9, at 100-01 (reporting no framing effect among the lawyer-subjects participating in their study).

^{89.} See supra text accompanying note 85.

however, provided details on the finances of the companies, identified the attorney's fees, and involved stakes that were half as large. The scenario, labeled "Suit and Settlement," asked the participants to imagine that they were acting as counsel for one of the parties in a copyright action. The participants evaluated the case either from the plaintiff's perspective (gains frame) or the defendant's perspective (losses frame). In each case, the subjects learned that the plaintiff sought \$200,000, the stated likelihood of victory was 50%, and the cost of litigating to a verdict was \$50,000 for each party. For subjects in both conditions, the settlement offer exceeded the expected value of trial by \$10,000. The materials read as follows:

Imagine that you are [GAINS: plaintiff's/LOSSES: defense] counsel in a case in which a plaintiff has sued a defendant for \$200,000 in a copyright action. Both the plaintiff and the defendant are mid-sized publishing companies with annual revenues of about \$2.5 million per year. You helieve that the case is a simple one, hut it presents some tough factual questions. There is no dispute as to the amount at stake, only as to whether the defendant's actions infringed on the plaintiff's copyright. You believe that the [GAINS: plaintiff' LOSSES: defendant] has a 50% chance of [GAINS: recovering/LOSSES: losing] the full \$200,000 at trial and a 50% chance of [GAINS: recovering/LOSSES: losing] \$0. You expect that should the parties fail to settle, each will spend approximately \$50,000 at trial in litigation expenses. Assume that there is no chance that the losing party will have to compensate the winner for these expenses.

The case is approaching a trial date. The [GAINS: defendant/LOSSES: plaintiff] has offered to [GAINS: pay the plaintiff \$60,000/ LOSSES: accept \$140,000] to settle the case. Would you recommend that your client [GAINS: accept/LOSSES: agree to pay] the settlement?⁹⁰

Among the participants evaluating this case through the gains frame (plaintiff's perspective), 59.1% (thirteen out of twenty-two) agreed to settle. Among the participants evaluating the case from the losses frame (defendant's perspective), 37% (ten out of twenty-seven) agreed to settle.⁹¹ Although the pattern of results is consistent with framing theory, the difference between the responses of the two groups is not statistically significant.⁹²

As compared to the law students in Rachlinski's similar study, the magnitude of the framing effect, as measured by the difference between the settlement rates in the gains frame as compared to the losses frame, was smaller among insurers. Among the insurers in our study, the difference in settlement rate between the insurers in the gains and losses frames was 22.1 percentage points. In contrast, among the law students in Rachlinski's study, the difference was 46.1 percentage points. However, loglinear analysis of the difference

^{90.} Stimulus materials on file with the authors.

^{91.} One subject did not respond.

^{92.} p=.157, Fisher's Exact Test.

between the results in the study of law students and the present study revealed that the differences were not significant. Thus, even though the present results did not produce a significant framing effect, we cannot conclude that they are significantly different from the study of law students. Table 3 (presented later) compares this result to the results from Rachlinski's similar study, along with the results of our next framing study on insurers.

b. Framing Study #2

In our second framing study, we presented half of the reinsurance executives with a litigation scenario arising from reinsurance. The scenario, labeled "Settlement Evaluation," provided a brief set of facts documenting a dispute between a primary insurer and a secondary insurer (i.e., a reinsurance company). The materials stated that the dispute arose out of an ambiguity as to whether punitive damages were covered by the reinsurance agreement. The primary insurer paid the claim and then sued the reinsurer to cover the claim. The materials described the suit either from the perspective of the reinsurer. The primary insurer was the non-stakeholder and, therefore, faced prospective gains. The reinsurer was the stakeholder and, therefore, faced prospective losses.

The materials then asked the participants to decide whether to accept a settlement offer. In both frames, the total amount at issue was \$200,000, the stated likelihood of victory was 50%, and the cost of litigating through trial was \$50,000. The settlement offer in both cases was \$10,000 better than the expected value of the trial. In the gains frame, the participant had to decide to accept or reject an offer of \$60,000 to settle the case, whereas in the losses frame, the participant had to decide to accept or reject an offer to pay \$140,000 to settle the case. The materials provided as follows:

[GAINS: Suppose that you work for Primary Insurance Company ("Primary") and that your company is in a dispute with Secondary Reinsurance Company ("Secondary").

LOSSES: Suppose that you work for Secondary Reinsurance Company ("Secondary") and that your company is in a dispute with Primary Insurance Company ("Primary").]

The dispute arose as follows: [GAINS: Your company/LOSSES: Primary] settled a case for \$400,000 on behalf of an insured. [GAINS: Your company/LOSSES: Primary] then sought reimbursement of \$200,000 from [GAINS:

Secondary/LOSSES: your company] under the two companies' reinsurance agreement. [GAINS: Secondary/LOSSES: Your company] refused to pay, arguing that [GAINS: your company's/LOSSES: Primary's] settlement payment was primarily for punitive damages and that the reinsurance agreement did not contemplate that [GAINS: Secondary/LOSSES: your company] would reimburse [GAINS: your company/LOSSES: Primary] for punitive damage payments. [GAINS: Your company/LOSSES: Primary] disagrees.

After several months, [GAINS: your company/LOSSES: Primary] filed suit against [GAINS: Secondary/LOSSES: your company], seeking payment of the \$200,000. Based on careful research, a review of the reinsurance contract, and an analysis of the judge who will hear the case, your attorneys believe that [GAINS: your company/LOSSES: Primary] has a 50% chance of winning the full \$200,000 at trial and a 50% of winning \$0. They expect that the attorneys' fees at trial will be about \$50,000. Immediately prior to trial, [GAINS: Secondary/LOSSES: Primary] has offered to [GAINS: pay \$60,000/LOSSES: accept \$140,000] to settle the case. 94

In the gains frame, we asked the participants: "Will you accept the \$60,000 payment to settle the case?" In the losses frame, we asked the participants: "Will you agree to pay \$140,000 to settle the case?"

The results reveal little difference between the two conditions. In the gains condition, 50% of the subjects (ten out of twenty) accepted the settlement. In the losses condition, 65% (thirteen out of twenty) accepted the settlement. This difference is not statistically significant. And, contrary to the framing hypothesis, there is a non-significant trend towards a greater desire for certainty or risk aversion in the *losses* condition rather than in the gains condition. Thus, the results failed to demonstrate framing. Furthermore, the results here differ significantly from those of Rachlinski's study of law students, which used a different context, but similar numbers. Table 3, in the next section, makes this comparison directly.

c. Framing Study #3

As a third assessment of the effect of framing on insurers, we gave the insurers at the Connecticut conference a short scenario requiring them to evaluate a settlement offer. The scenario, entitled

^{94.} Stimulus materials on file with the authors.

^{95.} Id.

^{96.} Id.

^{97.} p > .5, Fisher's Exact Test.

^{98.} These differences were significant. $G^2(1)=6.17$, p=.013. Likewise, Guthrie, Rachlinski, and Andrew Wistrich found that sitting judges evaluating litigation options preferred settlement when framed as a gain rather than as a loss. Guthrie et. al., Inside the Judicial Mind, supra note 9, at 794-99. In their study, Guthrie et al. found that 39.8% of the judges evaluating the gains frame accepted the settlement, as compared to 25% of the judges evaluating the loss frame. Id. at 797.

"Case Evaluation: Settlement Decision," described an auto accident in which the defendant was clearly at fault, but the circumstances of the accident made insurance coverage uncertain. The materials asked the participants to assume that they managed the insurance company and had to decide whether to litigate the issue of insurance coverage or to accept a settlement that would leave them covering two-thirds of the underlying claim. The materials indicated that the underlying claim was worth \$300,000, that the coverage issue was equally likely to come out either way, and that the case would cost \$50,000 to litigate to a verdict. Thus, the settlement offer had an expected value of \$150,000 plus or minus (depending upon perspective) the \$50,000 cost of litigating the case.

The participants read one of two versions: a gains version or a losses version. In the gains version, the materials indicated that state law allowed the plaintiffs to sue the insurance company directly, and that the plaintiffs took advantage of this option. As a result, the insurance company would have to sue the insured party in order to litigate the issue of insurance coverage. In the losses version, the plaintiff simply sued the insured party, and the insured party named the insurer as a co-defendant. In effect, the only difference between these versions is which party would first have to pay the plaintiff and then recover from the other. The gains frame cast the insured as the stakeholder while the losses frame cast the insurer as the stakeholder. The materials read as follows:

Suppose that you are a manager of an insurance company. Your company is the primary liability insurer of PDQ Company, a package-delivery company. One of PDQ's drivers recently injured a pedestrian while making a delivery. Police reports indicate that PDQ's driver was high on marijuana at the time of the accident.

[GAINS: Because the laws of the state in which the accident occurred allow accident victims to sue the insurer of alleged tortfeasors directly, the pedestrian has filed suit against your company. Your lawyers have named PDQ as a co-defendant hecause insurance coverage is unclear in this case.

LOSSES: The pedestrian has filed suit against PDQ, and PDQ has named you as a co-defendant because insurance coverage is unclear in this case.

According to your lawyers, it is clear under the laws of the state in which the accident occurred that PDQ is liable for its driver's conduct (even though it was unauthorized). It is not clear, however, whether PDQ is entitled to claim coverage under the insurance policy. If PDQ is found directly liable to the pedestrian for negligently failing to monitor the driver, PDQ is entitled to claim insurance coverage. If PDQ is found only vicariously liable for employee actions on the job, PDQ is not entitled to claim insurance coverage. Your insurance company lawyers tell you that there is about a 50% chance that a court would find that PDQ is covered (in which case you will have to pay for plaintiff's damages) and a 50% chance that it would find that PDQ is not covered (in which case you will not). Litigating this issue would cost your company \$50,000.

The pedestrian has informed [GAINS: you/ LOSSES: PDQ] that he will accept \$300,000 to settle the case. You and PDQ think this is a good settlement given the nature of his injuries, so you have agreed that the pedestrian should be paid the \$300,000.

[GAINS: PDQ has offered to pay you 1/3 of this amount (i.e., \$100,000) to settle your claim against them on the issue of insurance coverage.

LOSSES: PDQ has offered to accept 2/3 of this amount from you (i.e., \$200,000) to settle their claim against you on the issue of insurance coverage.]

What should you do?99

The gains frame offered the participants two options: "Agree to accept the payment of 1/3 of the liability from PDQ as a settlement with PDQ" or "Reject the payment of a 1/3 share and contest the full \$300,000 claim with PDQ." The losses frame also offered the participants two options: "Agree to pay 2/3 of the liability as a settlement with PDQ" or "Reject paying a 2/3 share and contest the full \$300,000 claim with PDQ." In both cases, the settlement offer was equal to the expected value of litigating the case. For the subjects facing the gains frame, the \$100,000 settlement offer had an identical expected value to the 50% chance of a \$300,000 award minus the \$50,000 cost of litigation; for the subjects facing the losses frame, the \$200,000 settlement offer had an identical expected value to the 50% chance of a \$300,000 award plus the \$50,000 cost of litigation.

The results revealed no differences between the two conditions. In the gains frame, 75% (fifteen out of twenty) of the participants agreed to the sure option of accepting the settlement. In the losses frame, 69.6% (sixteen out of twenty-three) of the participants agreed to the sure option of accepting the settlement. These responses did not differ significantly, ¹⁰² but the results differed significantly from those of Rachlinski's study of law students. ¹⁰³ Also, unlike many of the previous studies of suit and settlement in which a majority of the subjects rejected settlement offers slightly greater than the expected value, most participants in this study accepted the settlement offer.

d. Summary of Framing Studies

Table 3, below, compares the results of the three framing studies reported here to those of Rachlinski's study of law students.

^{99.} Stimulus materials on file with the authors.

^{100.} Id.

^{101.} Id.

^{102.} p > .5. Fisher's Exact Test.

^{103.} $G^2(1) = 4.4, p = .036.$

Study #1 is most comparable to Rachlinski's study, as it employed roughly the same settlement numbers and the same context (a copyright dispute). Study #2 used similar settlement numbers, but a different context (a reinsurance dispute). Study #3 used different settlement numbers and a different context (an insurance coverage dispute).

Table 3: Settlement Rate (in %) Among Different Groups (and Sample Size)

Condition	Law Students	Insurers,	Reinsurers,	Insurers
	(Rachlinski, 1996)	Study #1	Study #2	Study #3
	(copyright)	(copyright)	(reinsurance)	(insurance)
Gains	76.9 (13)	59.1 (27)	50.0 (20)	75.0 (20)
Losses	30.8 (13)	37.0 (22)	65.0 (20)	69.6 (23)
Framing Effect	46.1	22.1	-15.0	5.4
(Gains - Losses)				

Overall, the insurers demonstrated some resistance to framing. In all three studies, the insurers assessed settlement offers in a fashion that is much more consistent with rational choice theory than the assessments of laypersons. The ability to adopt a risk-neutral perspective and see litigation as a cost of doing business is fundamental to the insurance industry, and the participants in our study seem to have mastered it.

3. Self-Serving Biases

People tend to make judgments about themselves, their abilities, and their beliefs that are "egocentric" or "self-serving." ¹⁰⁴ For example, individuals routinely estimate that they are above average when it comes to desirable characteristics, including their health, ¹⁰⁵ driving ability, ¹⁰⁶ occupational talent, ¹⁰⁷ and the likelihood of having a

^{104.} See Michael Ross & Fiore Sicoly, Egocentric Biases in Availability and Attribution, 37 J. PERSONALITY & Soc. PSYCHOL. 322 (1979) (reporting experimental evidence that people more readily recalled their own contributions to group projects and accepted more responsibility for group success than others attributed to them).

^{105.} See Neil D. Weinstein, Unrealistic Optimism About Future Life Events, 39 J. PERSONALITY & Soc. PSYCHOL. 806, 809-18 (1980) (detailing two studies in which respondents judged themselves as substantially less likely to suffer from several kinds of health problems).

^{106.} See Ola Svenson, Are We All Less Risky and More Skillful Than Our Fellow Drivers?, 47 ACTA PSYCHOLOGICA 143, 145-46 (1981) (claiming a "strong tendency to believe oneself as safer and more skillful than the average driver").

^{107.} See K. Patricia Cross, Not Can, But Will College Teaching Be Improved?, NEW DIRECTIONS FOR HIGHER EDUC., Spring 1977, at 1, 9-10 (describing the results of a study

successful marriage.¹⁰⁸ Additionally, people often overestimate their contributions to collective activities. Following a conversation, for example, people exaggerate their participation;¹⁰⁹ similarly, when married couples are asked to estimate the percentage of household tasks they perform, their combined estimates typically exceed 100%, indicating that one or both overestimate their contributions.¹¹⁰

Self-serving biases can occur for several reasons. First, people might not really believe that they are better than average, but they might report that they are in an attempt to present themselves in a favorable light.111 In addition, self-serving biases might also reflect selective memory. People are more likely to remember their own actions than the actions of others. When asked to recall their contribution to a conversation or their participation in housework. they are more likely to remember their participation than the participation of the other group members or a spouse. 112 Third, people might engage in self-serving searches for information to support theories they want to believe. For example, married couples doubtless want to believe that their marriages will be successful. It is even possible that self-serving biases might occasionally be a product of ambiguous questions, leading people to define success in different, and perhaps self-serving, ways. 113 For example, when asked to evaluate their driving abilities, different people might interpret "driving ability" as referring to one particular aspect of driving. Consequently, the respondents may rate themselves above average on that particular aspect of driving, rather than on some shared, general conception of driving ability.114

involving professors at the University of Nebraska, in which 94 percent rated themselves as "above-average" and 68 percent ranked themselves in the top quarter on teaching performance).

^{108.} See Lynn A. Baker & Robert E. Emery, When Every Relationship Is Above Average: Perceptions and Expectations of Divorce at the Time of Marriage, 17 LAW & HUM. BEHAV. 439, 441-43 (1993) (detailing the results of a study measuring marriage license applicants' perceptions of the frequency of divorce in the U.S.; while respondents predicted a 50% divorce rate, the median probability given for their own marriages ending in divorce was zero).

^{109.} Ross & Sicoly, supra note 104, at 325-27.

^{110.} Id. at 325-26.

^{111.} See, e.g., SUSAN T. FISKE & SHELLEY E. TAYLOR, SOCIAL COGNITION 78-82 (2d ed. 1991) (1984) (outlining self-serving biases and noting that "motivational needs both to preserve one's ego and to present oneself in the best light to others seem to be important").

^{112.} Id. at 82 (citing Ross & Sicoly, supra note 104, at 324, 326).

^{113.} See, e.g., George Loewenstein, Samuel Issacharoff, Colin Camerer & Linda Babcock, Self-Serving Assessments of Fairness and Pretrial Bargaining, 22 J. LEGAL STUD. 135, 141 (1993).

^{114.} Svenson, supra note 106, at 145-46.

Self-serving biases can have an unfortunate influence on the litigation process.¹¹⁵ Due to self-serving biases, litigants, their lawyers, and other stakeholders might overestimate their own abilities, the quality of their advocacy, and the relative merits of the positions they are advocating.¹¹⁶ These self-serving assessments, in turn, might thwart objectively reasonable efforts to settle cases.

In one illustrative study,¹¹⁷ Linda Babcock and Greg Pogarsky randomly assigned student-subjects the role of plaintiff or defendant in a hypothetical personal injury case in which the only unresolved issue was the amount of damages the plaintiff should receive for pain and suffering. They provided the subjects with substantial information about the case and then asked them to predict the trial outcome. Plaintiff-subjects estimated that the judge would award them, on average, \$562,222; defendant-subjects, on the other hand, estimated that the judge would award the plaintiff only \$400,611, on average.¹¹⁸

In another study, George Loewenstein and colleagues asked undergraduate and law students to assess the value of a tort case in which the plaintiff sued the defendant for \$100,000 in damages arising from an automobile-motorcycle collision. These researchers assigned some of students the role of plaintiff and others the role of defendant but also provided both sets of subjects with identical information about the case. Nevertheless, the subjects interpreted the facts in self-serving ways. When asked to predict the amount that they thought the judge would award in the case, the plaintiff-subjects predicted that the judge would award \$14,527 more than the defendant-subjects predicted. When asked to identify what they perceived to be a fair settlement value, plaintiff-subjects selected a

^{115.} See, e.g., Linda Babcock & Greg Pogarsky, Damage Caps and Settlement: A Behavioral Approach, 28 J. LEGAL STUD. 341, 352-54 (1999) [hereinafter Babcock & Pogarsky, Settlement] (asserting that such biases contribute to disparities in trial estimates, decreasing the likelihood of settlement); Linda Babcock & George Loewenstein, Explaining Bargaining Impasse: The Role of Self-Serving Biases, J. ECON. PERSP., Winter 1997, at 109, 110 (explaining that self-serving biases can "conflate what is fair with what benefits oneself"); Loewenstein et al., supra note 113, at 140-55 (detailing how self-serving assessments of fairness can lead to variation in estimating settlement values).

^{116.} See, e.g., Babcock & Loewenstein, supra note 115, at 119 (noting that self-serving biases are likely to be "an important determinant of bargaining impasse"); Babcock & Pogarsky, Settlement, supra note 115, at 352-53 (noting that there is "abundant empirical evidence that individuals consistently exhibit 'self-serving biases' during negotiations").

^{117.} Babcock & Pogarsky, Settlement, supra note 115, at 359-67.

^{118.} *Id.* at 363. Even where the researchers informed the subjects that the jurisdiction imposed a \$250,000 cap on pain and suffering damages, they still found self-serving bias. *Id.* In that case, plaintiff-subjects predicted that the judge would award, on average, \$199,420, while defendant subjects predicted the judge would award only \$151,982. *Id.* at 363-64.

^{119.} Loewenstein et al., supra note 113, at 145.

^{120.} Id. at 150.

value \$17,709 higher than the value selected by defendant-subjects. 121 Thus, these results, like those from the Babcock and Pogarsky study, suggest that self-serving or egocentric biases can lead to bargaining impasse and wasteful litigation.

a. Self-Serving Bias Study

To test for the influence of self-serving bias on insurer decisionmaking in negotiation, we gave the participants at the Missouri conference a short scenario involving a negligently caused traffic accident. We gave all of the subjects the same facts about the accident and resulting injuries to the plaintiff, but we asked some of them to imagine that they were advising the plaintiff and others to imagine that they were advising the defendant. The facts of the scenario, entitled "Traffic Accident," read as follows:

Suppose that you are advising [Paula Peters regarding a claim that she has filed against David Devine and his insurer/David Devine and his insurer regarding a claim that Paula Peters has filed against them]. The facts giving rise to the claim are as follows:

While approaching an intersection in his car, David Devine failed to brake soon enough and inadvertently hit Paula Peters while she was walking across the crosswalk. David was not driving in excess of the speed limit, but his slightly worn brakes precluded him from stopping in time. Because the "walk" signal flashed before Paula entered the crosswalk, she neglected to look in the direction of David's car until it was too late. Paula – a wife, mother, and homemaker in her early forties – suffered a broken leg, a broken arm, and a concussion. Fortunately, all of her injuries eventually healed completely. Her leg and arm healed naturally after five weeks, but the concussion had lingering effects, including occasional headaches and bouts of dizziness that lasted for three months.

Based solely on the facts presented, what do you think is a fair settlement of this $\operatorname{claim}^{22}$

Clear-eyed insurers have no reason to advise the plaintiff to evaluate the claim any differently than those advising the defendant because they both received identical information about the underlying claim. Indeed, it would be counterproductive for insurers to engage in the self-serving bias. Doing so would lead them to overestimate the value of a claim, thereby leading them to litigate when they should settle. Prior work on the self-serving bias suggests, however, that the plaintiff-advisors would identify a fair settlement value that is significantly higher than that identified by the defendant-advisors.

^{121.} Id.

^{122.} Stimulus materials on file with the author.

^{123.} Except that negotiators who believe strongly that their position is correct might well bargain harder than those who do not.

The participants in our study gave essentially identical responses. The twenty-seven participants advising the plaintiff indicated, on average, that a fair settlement value was \$64,055.56, while the twenty-two participants advising the defendant indicated, on average, that a fair settlement value was \$69,636.36. Contrary to prior work on the self-serving bias in litigation, we found no statistically significant difference between the two groups; indeed, the trend, though non-significant, is in the opposite direction. ¹²⁴ With the number of participants available, we had over a 99.9 percent chance of detecting some significant difference between these groups if the effect of the self-serving bias on our study were of the same magnitude as that observed in the study by Loewenstein and his colleagues. ¹²⁵

b. Discussion of Self-Serving Bias

It is unclear why the insurers responded so differently from most other groups evaluating similar problems. Several possibilities present themselves. First, insurers almost always evaluate claims from the defense perspective. Here, we arbitrarily assigned some participants to play the role of plaintiff and others the role of defendant. Perhaps the insurers are so accustomed to looking at such problems from the defense side that those assigned to the plaintiff role were unable to overcome their conventional, defense-side view of the problem.

Second, in previous studies, researchers have presented subjects with substantially more information than we were able to provide to our study's subjects. In the Babcock & Pogarsky study, for example, researchers gave the subjects a four-page narrative and fourteen pages of excerpts from deposition transcripts. Likewise, in the Loewenstein et al. study, the researchers provided their subjects with twenty-seven pages of materials from an actual case on which their problem was based. Here, by contrast, we were only able to provide our study's subjects with a couple of paragraphs of facts. Perhaps the insurers needed more information to adopt the perspective or role necessary to trigger self-serving bias.

^{124.} Two-tailed t-test, p=.71. Mann Whitney Test, p=.84.

^{125.} When asking subjects to assess what a fair outcome would be, Loewenstein et al., supra note 113, at 150, observed that plaintiff subjects provided an average estimate that was \$17,709 higher than defendant subjects. This constituted a difference of 1.56 standard deviations (calculated from their report of sample size, means and standard errors). Power analysis for our sample size revealed that we had greater than a 99.9% chance of detecting a significant effect (p < .05) of the self-serving bias, if it had been present in a similar magnitude in our study.

^{126.} Babcock & Pogarsky, Settlement, supra note 115, at 360.

^{127.} Loewenstein et al., supra note 113, at 145.

Finally, insurers may simply be less prone to self-serving bias when evaluating cases. Given their expertise, their repeat-player status, and their emotional distance from the underlying dispute, it seems reasonable to speculate that they might be immune to self-serving interpretations of case facts. Researchers have documented ways to avoid the bias, 128 so perhaps the insurers have internalized these methods. This account is consistent with the anchoring and framing results reported above, which suggest that insurers are capable of evaluating litigation problems rationally.

III. CONCLUSION

This paper reports the results of several litigation problems two anchoring problems, three framing problems, and one self-serving bias problem—involving nearly two hundred participants from the insurance industry. The results reported in the paper suggest that these experts, relative to others who have been studied, make decisions that more closely approximate rational choice. The three phenomena tested here—anchoring, framing, and the self-serving bias—are well known to influence judgment in many contexts, yet we found that the insurers largely resisted their influence. With respect to anchoring, one of our studies showed a sizeable anchoring effect, but the other revealed no effect. None of our framing studies produced a significant effect; indeed, we showed that studies two and three produced significantly different results from similar work involving non-insurers. Finally, we found no self-serving bias, even though our sample size virtually assured us that we would find an effect, if the bias operated in the same way in our study as it had in previous research. Overall, the pattern of results here differs markedly from what one might have expected based on previous research involving subjects drawn from other populations.

This is not to say that insurers are perfectly rational; they are not. But rather than over-relying on the heuristics that have been shown to lead other decision-makers astray, insurers appear to have developed ways of assessing problems that tend to lead to choices that are consistent with rational choice. This is potentially quite important for understanding litigation and settlement behavior. As noted above, insurers are key stakeholders in litigation. ¹²⁹ In most civil cases, they are the *de facto* defendants, if not the *de jure* defendants, driving

^{128.} See Linda Babcock, George Loewenstein & Samuel Issacharoff, Creating Convergence: Debiasing Biased Litigants, 22 LAW & SOC. INQUIRY 913 (1997) (proposing a debiasing mechanism).

^{129.} See supra text accompanying notes 10, 14-18.

decisionmaking. Given their central role in the litigation process, their apparent ability to make more rational decisions has three important implications:

First, relative to uninsured parties, insurers are more likely to value cases objectively. They appear to have some ability to resist the effects of anchoring;¹³⁰ as a consequence, their assessments of case values appear to be somewhat more independent of the potential irrational influence of policy caps (and perhaps other anchors), than laypersons. Moreover, they appear less inclined to interpret case facts in self-serving ways,¹³¹ suggesting, again, that they are more likely to value cases reasonably.

Second, and relatedly, insurers might offer more equitable settlements than ordinary defendants because they are more likely to value cases objectively. Previous work on framing suggests that defendants are generally risk-seeking, leading them to make particularly stingy settlement offers and to reject sensible offers from plaintiffs. The work reported in this paper suggests that insurers are likely to behave in a more risk-neutral fashion. A settlement negotiation between a risk-averse plaintiff and a risk-neutral defendant is apt to more closely approximate the true value of the case than a negotiation between a risk-averse plaintiff and a risk-seeking defendant.

Finally, because insurers are more likely to value cases fairly and to propose more reasonable settlement terms, their participation in settlement negotiations is likely to lead to higher rates of settlement. Self-serving bias and risk-seeking proclivities by the defendant narrow the potential bargaining window, making settlement less likely. Insurers, however, seem to avoid these phenomena.

Ironically, then, insurers might be responsible for inducing both suit and settlement. They induce suit by insuring defendants who would otherwise be untenable as defendants, and they then induce settlement by negotiating in a more rational and equitable fashion than the defendants they insure.

Our conclusions are, of course, the product of a single group of studies that employ similar methodologies using only three different groups of subjects. More research using different groups and different

^{130.} See supra Part II.B.1.

^{131.} See supra Part II.D.1-2.

^{132.} Rachlinski, *Gains*, *supra* note 2, at 144-45 (stating that "defendants value the prospect of losing nothing," which can lead them to reject settlement offers and favor the riskier option of going to trial).

^{133.} See supra Part II.B.2.

methods would be needed to embrace the conclusion that insurers are uniquely rational in litigation and that this rational behavior will have the implications outlined above. In particular, the data need to be reconciled with studies that reveal the influence of deviations from the prediction of rational choice theory in actual cases (in which insurers presumably played some role).¹³⁴ Nonetheless, our study raises the possibility that these important litigation stakeholders might help reduce the level of irrational decisionmaking in the litigation process.

^{134.} See Rachlinski, Gains, supra note 2, at 149-60 (describing the results of a study analyzing settlement offers and jury awards in actual cases; the results showed significant risk-seeking behavior on the part of defendants).