

University of Pennsylvania Carey Law School

Penn Law: Legal Scholarship Repository

Faculty Scholarship at Penn Law

2010

Do Liquidated Damages Encourage Breach? A Psychological Experiment

Tess Wilkinson-Ryan

University of Pennsylvania Carey Law School

Follow this and additional works at: https://scholarship.law.upenn.edu/faculty_scholarship



Part of the [Behavioral Economics Commons](#), [Contracts Commons](#), [Economic Theory Commons](#), [Ethics and Political Philosophy Commons](#), [Law and Economics Commons](#), and the [Social Psychology Commons](#)

Repository Citation

Wilkinson-Ryan, Tess, "Do Liquidated Damages Encourage Breach? A Psychological Experiment" (2010). *Faculty Scholarship at Penn Law*. 772.

https://scholarship.law.upenn.edu/faculty_scholarship/772

This Article is brought to you for free and open access by Penn Law: Legal Scholarship Repository. It has been accepted for inclusion in Faculty Scholarship at Penn Law by an authorized administrator of Penn Law: Legal Scholarship Repository. For more information, please contact PennlawIR@law.upenn.edu.

DO LIQUIDATED DAMAGES ENCOURAGE BREACH? A PSYCHOLOGICAL EXPERIMENT

Tess Wilkinson-Ryan*

This Article offers experimental evidence that parties are more willing to exploit efficient-breach opportunities when the contract in question includes a liquidated-damages clause. Economists claim that the theory of efficient breach allows us to predict when parties will choose to breach a contract if the legal remedy for breach is expectation damages. However, the economic assumption of rational wealth-maximizing actors fails to capture important, shared, nonmonetary values and incentives that shape behavior in predictable ways. When interpersonal obligations are informal or underspecified, people act in accordance with shared community norms, like the moral norm of keeping promises. However, when sanctions for uncooperative behavior are specified or otherwise formalized between the parties, behavior becomes more strategic and more self-interested. A liquidated-damages clause makes the remedy for breach explicit. Using a series of web-based questionnaires, I asked participants to indicate the lowest financial incentive that they would accept to breach a hypothetical contract, showing some subjects a contract with a liquidated-damages clause and others an otherwise identical scenario in which damages were determined by “the law of contracts.” Subjects were more willing to breach a contract—an action normally dictated against by social and moral norms—when damages were stipulated. I argue that even when the law of contracts is clear itself on the legal remedy for breach, moral intuition differentiates between a background law like the rule of expectation damages and an obligation to pay damages included as a clause in the body of the contract. When parties stipulate damages, they clarify the respective expectations of the parties, permitting efficient breach without repudiation of the mutual understanding.

* Sharswood Fellow in Law & Psychology, University of Pennsylvania Law School. I am grateful to Jonathan Baron, David Hoffman, Janice Nadler, Jeffrey Rachlinski, Kathryn Spier, David Abrams, Bob Hillman, Stephanos Bibas, Polk Wagner, Jonathan Klick, Tom Baker, Paul George, Jason Dana, and Cristina Bicchieri for comments. I also received excellent feedback on earlier drafts of this Article at the American Law and Economics Association annual meeting, the Stanford/Yale Junior Faculty Forum, and from workshops with law school faculty at Florida State University, the University of Connecticut, Cornell University, Vanderbilt University, Rutgers School of Law-Camden, Temple University, Drexel University, University of Michigan, University of Virginia, Boston College, University of Illinois, University of California at Irvine, University of California at Los Angeles, and George Washington University.

TABLE OF CONTENTS

INTRODUCTION	634
I. EFFICIENT BREACH AND LIQUIDATED DAMAGES.....	638
A. <i>Theoretical and Empirical Approaches to Efficient Breach</i>	638
B. <i>Liquidated Damages in Contract Law</i>	642
C. <i>Economic Analysis of Liquidated Damages</i>	644
D. <i>Bounded Rationality and Liquidated Damages</i>	645
II. BEHAVIORAL ECONOMICS OF INCOMPLETE CONTRACTS	648
A. <i>Law and Theory of Incomplete Contracts</i>	648
B. <i>Behavioral Economics of Incomplete Contracts</i>	650
C. <i>Small Sanctions and Social Norms</i>	652
III. EXPERIMENTS: LIQUIDATED DAMAGES AND EFFICIENT BREACH	655
A. <i>Experiment 1: The Effect of Liquidated Damages on Willingness to Breach</i>	655
1. <i>Method</i>	658
2. <i>Results</i>	658
B. <i>Experiment 2: Effect of Penalty Clause</i>	660
1. <i>Method</i>	660
2. <i>Results</i>	660
C. <i>Experiment 3: Transparent Design with Follow-Up Questions</i>	662
1. <i>Method</i>	663
2. <i>Results</i>	663
IV. DISCUSSION	664
A. <i>Debiasing</i>	665
B. <i>Reconciling Conflicting Incentives</i>	668
C. <i>Implications for Contract Law</i>	669
CONCLUSION	671

INTRODUCTION

Economists claim that the theory of efficient breach allows us to predict when parties will choose to breach a contract if the legal remedy for breach is expectation damages.¹ Relying on the assumption that individuals are rational wealth maximizers, law-and-economics scholars argue that promisors are indifferent as between performance and breach,² that promisees and

1. E.g., Lewis A. Kornhauser, *An Introduction to the Economic Analysis of Contract Remedies*, 57 U. COLO. L. REV. 683, 687 (1986) (“The [economic] claim posits that since people respond to legal rules in an ‘economic’ fashion, one may use economic theory to predict the behavior of people in response to particular legal rules. For example, economic theory allows us to predict when a promisor will fail to perform a contract if the legal remedy for non-performance is expectation damages.”).

2. See ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 262–66 (5th ed. 2008) (showing a stylized example of rational behavior in efficient breach in which the only effect on the

promisors alike favor the rule of expectation damages,³ and that penalty clauses will deter efficient breach by imposing extra costs on the promisor.⁴ In other words, an economic prediction of human behavior says that when a promisor can make one extra dollar by breaching his contract, he will breach the contract.

As a descriptive model of human behavior, this set of premises and predictions lacks empirical support. Although the model of the rational actor is a useful tool in certain domains, it fails to capture important, shared, nonmonetary values and incentives that shape behavior in predictable ways. When interpersonal obligations—like contracts—are informal or under-specified, people act in accordance with shared community norms.⁵ However, when sanctions for uncooperative behavior are specified, codified, or otherwise formalized, behavior becomes more strategic and more self-interested.⁶

Consider the following anecdote: In December of 2001, the Boston Fire Department changed its sick-leave policy to allow 15 sick days per year. The previous system had allowed unlimited sick time, and the new rule was part of an initiative to bring professional management tools to the department.⁷ In 2001, firefighters took a total of 6432 days. In 2002, the total number of sick days rose to 13,431—more than double the previous year.⁸

The new system was ostensibly more rigid, with a higher penalty for taking sick days—each sick day brought workers closer to the prospect of unpaid time off. The old system, by contrast, had no explicit penalty at all for sick time. The old system had something powerful in its favor, though: the firefighters had a tradition of “toughing it out” through illness, showing

promisor's decision of whether to breach is the cost of breach as compared to the cost of performance).

3. See Alan Schwartz, *The Myth that Promisees Prefer Supra-compensatory Remedies: An Analysis of Contracting for Damage Measures*, 100 YALE L.J. 369 (1990) (arguing that in a competitive market promisees will not be willing to pay for a penalty clause, because punitive liquidated-damages clauses will be costly for promisees, and because the promisee's share of the surplus is determined by market prices).

4. Charles J. Goetz & Robert E. Scott, *Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and Theory of Efficient Breach*, 77 COLUM. L. REV. 554, 562 (1977) (“[A]n enforceable *in terrorem* clause might discourage promisors from breaching and reallocating resources where changed circumstances would ordinarily create efficiency gains from this behavior.”).

5. See, e.g., ROBERT C. ELLICKSON, *ORDER WITHOUT LAW* 1–11 (1991) (introducing the famous case study of Shasta County ranchers and the role of community norms in local legal decision making).

6. See, e.g., Daniel Houser et al., *When punishment fails: Research on sanctions, intentions and non-cooperation*, 62 GAMES & ECON. BEHAV. 509, 517 (2008) (showing in a trust game that when investors can enforce sanctions to enforce their requests, trustees return less than when the investors cannot enforce sanctions).

7. Douglas Belkin, *Boston Firefighters Sick – or Tired of Working 15-Day Allowance Seen Fueling Call-Ins*, BOSTON GLOBE, Jan. 18, 2002, at B1.

8. Scott S. Greenberger, *Sick day abuses focus of fire talks*, BOSTON GLOBE, Sept. 17, 2003, at B7.

up for work even when it hurt.⁹ The new policy made sick leave into a contractual entitlement rather than a breach of protocol.

The penalty for missing a day under the new system was not big enough to deter absenteeism on its own (15 days of illness per year is, after all, a lot—most people do not need to worry that they will need all of those days), but it changed the social norm in such a way that firefighters were willing to miss work in situations in which they otherwise would have felt obligated to show up. In the firefighters' case, the policy was costly, insofar as it encouraged workers to stay home even when they could have worked—the policy encouraged workers to breach in cases in which breach was overall more costly than performance. But what would happen if the incentives were more carefully calibrated, such that parties would breach only if it were efficient to do so? What if the Fire Department had been able to set the number of sick days at a level that would deter malingerers from exploiting the policy but encourage contagious workers to stay at home in cases in which they might otherwise have felt social pressure to show up for work? In that case, the formalization of the sick-leave policy might have done some good by reducing the effect of the social norm in cases in which it was arguably counterproductive. Put differently, formalizing the sanction for breach of an agreement might be a means of encouraging breach when it is otherwise efficient to do so.

This Article uses the analytical framework suggested by the firefighters' sick-time policy to map the relationship between liquidated-damages clauses in contracts and the parties' propensities to breach. The experiments reported here offer evidence for a positive relationship between the presence of a liquidated-damages clause in a contract and parties' willingness to breach a contract when breach is profitable. In other words, when the penalty for breach is formally included in the agreement between the parties—like the firefighters and the Fire Department—parties are more likely to choose to breach.

Liquidated damages are a means of making the sanction for breach explicit within a contract. Decision researchers have found experimental evidence that, when social norms are in conflict with efficiency incentives, a more explicit incentive structure leads to more self-interested behavior.¹⁰ Even when the law of contracts is arguably clear itself on the legal remedy for breach, moral intuition differentiates between a background law like the rule of expectation damages and an obligation to pay damages included as a clause in the body of the contract. When parties stipulate damages, they clarify the respective expectations of the parties, permitting efficient breach without repudiation of the mutual understanding.

9. Belkin, *supra* note 7 (noting the culture of pride in toughness that seemed to prevent overuse of the unlimited sick days under the previous system).

10. For a good review, see Samuel Bowles, *Policies Designed for Self-Interested Citizens May Undermine "The Moral Sentiments": Evidence from Economic Experiments*, 320 *SCI.* 1605, 1608 (2008).

These experiments offer an account of the psychology of legal decisionmaking at the intersection of moral rules of promise and legal rules of contract. Considerable evidence suggests that most people think that there is a moral element to contract law and breach of contract.¹¹ In behavioral studies, participants routinely report that a contract is a promise, that breach of contract is immoral, and that breach is a moral harm even when the promisee is fully compensated for the expected benefit of the contract.¹² People think that the moral obligation is to perform as specified, not to confer a benefit as great as the value of the promised performance.¹³ It seems that most people believe that the content of the promise is the text of the contract. In this Article, I will focus on cases in which the moral aversion to breach of contract is in tension with economic incentives—efficient-breach opportunities. In some cases, breach is more profitable than performance. However, under most common-sense moral theories of contract, performance is morally preferable and perhaps even obligatory.

A moral aversion to breach may prevent exploitation of apparently wealth-maximizing opportunities. However, I will offer evidence in these experiments that moral intuitions about contract are not immutable. Psychologists and behavioral economists have observed in many contexts that actors are more likely to defy a social norm when the penalty for their non-cooperation is real and explicit, but not so harsh as to deter the behavior on its own terms.¹⁴ I argue here that weak sanctions in economics games serve the same function as liquidated-damages clauses in efficient breach situations. The liquidated-damages clause makes the remedy for breach explicit but not unduly punitive. Under these conditions, I predicted that people would be more willing to breach a contract, an action normally dictated against by social and moral norms. Data reported here suggests that people prefer to breach a contract with a liquidated-damages clause to one with an identical remedy provided by the rule of expectation damages. One interpretation of these results, supported by both descriptive and normative scholarship in this field, is that liquidated-damages clauses encourage efficient breach by changing the parties' understanding of the content of the promise.

In Part I, I review descriptive and normative scholarship on efficient breach and liquidated-damages clauses, and claim that drafting liquidated-damages clauses may encourage parties to think deliberatively about the costs and benefits of their contractual agreements. In Part II, I

11. Tess Wilkinson-Ryan & Jonathan Baron, *Moral Judgment and Moral Heuristics in Breach of Contract*, 6 J. EMPIRICAL LEGAL STUD. 405 (2009) (showing that participants in a series of experiments were sensitive to the moral context of breach of contract).

12. *See id.* at 417 (finding that subjects not only suggested that damages for breach of contract should be higher than expectation level, but that they thought that breach was morally wrong even when those damages were paid).

13. *See id.* at 420 (citing data to suggest that subjects think that specific performance is an appropriate remedy, even when the harm is arguably easily remediated with money damages).

14. *See* Bowles, *supra* note 10, at 1605 (reviewing evidence that introducing sanctions into a situation previously governed by moral norms undermines the moral norms in question).

analyze the possible effects of liquidated damages in light of evidence from experimental psychology and economics on behavioral responses to incomplete contracts and mild sanctions. In Part III, I report findings from three short experiments. In the first experiment, I find that subjects require a bigger financial incentive to breach a contract without a liquidated-damages clause than a contract with a liquidated-damages clause. Second, I replicate this effect with a penalty clause, showing that subjects prefer to breach a contract with a liquidated-damages clause even when it is more costly (e.g., the damages are higher) than paying the expectation-level damages in a contract without stipulated damages. In the third experiment, I find that subjects' willingness to breach a contract with a liquidated-damages clause is driven by the belief that the clause changes the promisee's subjective probability of breach. Subjects think that breaching a contract when the other party expects breach is less immoral and will lead to fewer reputation costs. In Part IV, I discuss the implications of this research, including the use of liquidated damages as a debiasing mechanism and possible policy prescriptions suggested by these results. I suggest that liquidated damages may offer a means of reconciling two normatively valuable goals: wealth maximization on the one hand and maintenance of a moral culture of promise on the other.

I. EFFICIENT BREACH AND LIQUIDATED DAMAGES

A. *Theoretical and Empirical Approaches to Efficient Breach*

Under an economic analysis, breach of contract is efficient if it leaves no one worse off and at least one party better off. Put differently, economic analyses of breach are mainly concerned with situations in which breach is Pareto superior, rather than just overall profit maximizing.¹⁵ In contrast with moral theories that hold that breach of contract is morally wrong insofar as it requires one party to break a promise,¹⁶ the economic view regards the contractual obligation as an obligation either to perform or to pay damages in an amount equal to the expected benefit of performance.¹⁷ The law of contracts takes no explicit position on efficient breach, but the remedies for breach of contract are more or less in line with the economic analysis of

15. See, e.g., Steven Shavell, *Damage measures for breach of contract*, 11 BELL J. ECON. 466, 467 (1980) (discussing the importance of Pareto efficiency in the analysis of contractual damages).

16. See CHARLES FRIED, *CONTRACT AS PROMISE* 16 (1981) ("An individual is morally bound to keep his promises because he has intentionally invoked a convention whose function is to give grounds—moral grounds—for another to expect the promised performance. To renege is to abuse a confidence he was free to invite or not, and which he intentionally did invite." (footnote call number omitted)).

17. See, e.g., Kornhauser, *supra* note 1, at 686 ("Economic analyses reject the view of contract as promise, and replace it with the idea that contract law ought to promote 'efficiency.'" (footnote call number omitted)).

contracts.¹⁸ The “penalty” for breach is set at the expectation level, which in turn provides optimal incentives for efficient breach. A promisor who is required to pay expectation damages in the event of breach will not breach unless it is profitable to do so even after compensating the promisee, meaning that the promisor’s incentives internalize the costs to the promisee. The economic prediction is that, under these laws of contract, parties will breach a contract whenever breach is more profitable than performance. The experiments in this Article are designed to test that prediction empirically.

Expectation damages, as noted above, provide arguably optimal incentives for parties to perform when performance is valuable and to breach when it is not. In the empirical tests reported in this Article, participants evaluate stylized efficient-breach scenarios in which it is clear that breach is the better economic choice, but this experimental design is not intended to gloss over common problems with damages awards for breaches of contract. For breach to be Pareto efficient, the promisee must receive full expectation damages—that is, she must realize the full expected benefit of the contract.¹⁹ There are legitimate reasons to believe that in a typical efficient-breach scenario, a real-world promisee will not be adequately compensated. First, damages are limited to losses that are foreseeable²⁰ and reasonably certain,²¹ and there are no damages for idiosyncratic emotional losses stemming from nonperformance. And, at least some cases will burden the promisee with significant transaction costs.²² The examples and cases used in this Article attempt to minimize these concerns and offer situations in which the promisee expects to earn a certain monetary profit from performance and will receive as damages an amount equal to the original expected profit. This means a sacrifice of a certain amount of realistic complexity to make the incentives as unambiguous as possible for subjects.

The experiments and arguments in this Article build on both the normative premises described above (namely, that sometimes breach is preferable to performance) but also on the empirical and philosophical observation that most people think it is immoral to break a promise, and that breaching a contract is a form of promise breaking. The traditional moral view of contracts considers breach of contract a moral violation.²³ Moral theorists

18. See E. ALLAN FARNSWORTH, *CONTRACTS* § 12.3, at 735 (4th ed. 2004) (observing that the economic analysis “tends, to a surprising extent, to confirm the choices that common law judges made without the benefit of such insights”); see also John H. Barton, *The Economic Basis of Damages for Breach of Contract*, 1 J. LEGAL STUD. 277, 300 (1972) (arguing that expectation damages provide optimal incentives for efficient breach).

19. See Shavell, *supra* note 15.

20. RESTATEMENT (SECOND) OF CONTRACTS § 351 (1981).

21. *Id.* § 352.

22. For a more in-depth discussion of the inadequacy of actual damages, see Melvin A. Eisenberg, *Actual and Virtual Specific Performance, the Theory of Efficient Breach, and the Indifference Principle in Contract Law*, 93 CAL. L. REV. 975, 989–97 (2005) (citing the rules of foreseeability, certainty, and lost profits, among others, as limits to recovery).

23. See generally P. S. ATIYAH, *THE RISE AND FALL OF FREEDOM OF CONTRACT* 1–7 (1979) (arguing that promise-based liabilities rely on a belief in values of autonomy and free choice).

like Charles Fried have argued persuasively that a contract is a promise, and that breach of contract is immoral for the same reasons that it is morally wrong to break a promise.²⁴ In many respects, this view is in accordance with the common-sense moral theories of promise and contract, in particular because it identifies breach as a moral harm irrespective of the availability of damages for the promisee. Legal scholars writing about the moral harm of breach of contract have recently begun to articulate the nature of that harm in terms of its effects on our interest in human sociability and, in turn, on the moral culture of promising.²⁵ The general claim is that there is a real psychological harm from breach of contract stemming from the alienation that results from a repudiation of solidarity.²⁶ At least one doctrinal claim in the same vein holds that when there is a divergence between the law of contracts and moral norms of promising, there are real harms to the moral culture.²⁷

In fact, from the point of view of common-sense moral norms, legal remedies for contract are insensitive to the moral context of breach. Contract law espouses the principle of just compensation, meaning that the purpose and measurement of damages are oriented toward compensating the promisee rather than deterring or punishing the breacher.²⁸ There is no extra punishment for willful breach: a promisor who decides not to perform is subject to the same damages whether his breach is opportunistic or reluctant. Courts do not normally require parties to actually keep their promises—that is, they do not normally award specific performance.²⁹

These tenets of contract law do not always reflect moral intuition, and, in fact, they are not particularly good descriptors of actual legal behavior. In the earliest studies of real contractual relations, Stewart Macaulay found that many businessmen relied so heavily on the moral norms against promise breaking that they preferred informal deals to written contracts.³⁰ More recent research on the notion of a “psychological contract” has offered

24. FRIED, *supra* note 16, at 9–17.

25. See Daniel Markovits, *Solidarity at Arm's Length* 1 (2008) (unpublished manuscript), available at <http://www.law.upenn.edu/academics/institutes/ilp/2008papers/MarkovitsSolidarityatArmsLength.pdf> (arguing that the “bare wrong” in promise breaking is the denial of the human solidarity inherent in the undertaking of promising).

26. *Id.* at 3 (“Breaking a promise . . . undermines solidarity. It involves a kind of insult, which alienates or estranges the promisor and promisee, placing their intentions undesirably at odds—that is, in a way that sets back their interest in solidarity. And that is why it is wrong.”).

27. Seana Valentine Shiffrin, *The Divergence of Contract and Promise*, 120 HARV. L. REV. 708, 712 (2007) (arguing that “law must be made compatible with the conditions for moral agency to flourish”).

28. FARNSWORTH, *supra* note 18, § 12.1, at 756 (“Our system of contract remedies is not directed at *compulsion* of *promisors* to *prevent* breach; it is aimed, instead, at *relief* to *promisees* to *redress* breach.”).

29. *Id.* § 12.5 (noting that specific performance is not permitted where money damages are adequate to protect a promisee’s interest).

30. Stewart Macaulay, *Non-Contractual Relations in Business*, 28 AM. SOC. REV. 55, 60 (1963); *id.* at 58 (“Businessmen often prefer to rely on ‘a man’s word’ in a brief letter, a handshake, or ‘common honesty and decency’—even when the transaction involves exposure to serious risks.”).

substantial evidence that parties are sensitive to perceived breaches of both formal and informal contracts, and that breach reduces interpersonal trust and cooperation.³¹ Experimental researchers have shown, using actual form contracts, that laypeople believe that they are legally and morally bound to the word of the document that they signed, even if it contains clauses that are unenforceable.³² Legal scholars have also discerned that the moral rule against breaking promises has such purchase in our culture that it is not only a moral norm but a social norm, and one that comes with real social costs, including loss of reputation.³³

The studies reported in this Article are extensions of previous research that demonstrated specifically that laypeople believe that breach of contract is immoral.³⁴ In earlier studies, subjects were presented with breach-of-contracts cases and asked to assess the legal, economic, and moral implications of breach. They reported overwhelmingly that breach was immoral, and found it even more immoral when the promisor would realize an economic gain from his breach.³⁵ Subjects indicated that breaching a contract is a moral harm in itself, separate from the loss incurred by the promisee.³⁶ Subjects set damages awards significantly higher than expectation.³⁷ In aggregate, behavioral results on contracts are fairly clear that people think that breach of contract is morally problematic. Assuming that people are willing to incur a cost to themselves to avoid a moral harm, these experimental data suggest that people will be reluctant to breach contracts.

One helpful framing for the systematic resistance to breach is that it represents a kind of moral heuristic.³⁸ A heuristic is a rule of thumb, and a number of commentators have observed that people seem to use these shortcuts not only for thinking about questions of fact, but also for making moral judgments. Jonathan Baron first noticed this in the domain of punishment.³⁹ He found that people ignore arguably important information

31. Sandra L. Robinson & Denise M. Rousseau, *Violating the Psychological Contract: Not the Exception but the Norm*, 15 J. ORGANIZATIONAL BEHAV. 245, 245 (1994) (describing the role of perceived breach of contract in the employment context).

32. See, e.g., Dennis P. Stolle & Andrew J. Slain, *Standard Form Contracts and Contract Schemas: A Preliminary Investigation of the Effects of Exculpatory Clauses on Consumers' Propensity to Sue*, 15 BEH. SCI. & L. 83 (1997) (finding evidence that parties believe that they are bound to the terms of a contract that they have signed, even if the contract contains unenforceable exculpatory clauses).

33. See, e.g., Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 MICH. L. REV. 1724, 1786 (2001) (citing the importance of reputation effects in intra-industry contracting practices).

34. Wilkinson-Ryan & Baron, *supra* note 11 (citing findings from questionnaire data indicating that respondents believed breach of contract to be immoral).

35. *Id.* at 413–14 (Experiment 1).

36. See *id.* at 417–20 (Experiment 3).

37. *Id.* at 413–14 (Experiment 1).

38. For one of the earliest discussions of the idea of a moral heuristic, see Jonathan Baron, *Nonsequentialist decisions*, 17 BEHAV. & BRAIN SCI. 1 (1994).

39. Jonathan Baron & Ilana Ritov, *Intuitions about Penalties and Compensation in the Context of Tort Law*, 7 J. RISK & UNCERTAINTY 17 (1993).

about the effects of a given punishment, and base their punishment decisions solely on their notion of moral desert.⁴⁰ Cass Sunstein has taken up this line of argument and argued that there is a catalogue of moral judgments that rely in part on heuristic judgments.⁴¹ That is, people mistake useful shortcuts for moral rules, and apply those rules to situations in which they should no longer apply. This Article offers evidence that subjects have a bias against breach of contract. Although keeping one's word is a useful heuristic in most situations, it is not necessarily helpful to continue to apply such a rule to a situation in which neither party would actually prefer performance—the kinds of cases in these studies.

Implicit in the discussion of an antibreach “bias” is the presumption that there are at least some cases in which breach is a better choice than performance. This claim is not intended to imply a strong stance in favor of wealth maximization as the dominant normative principle. Instead, I am making the weaker claim that in at least some instances, one party may be able to realize a benefit of breach without harming the other party, and that in such cases, breach is preferable to performance. However, because promising is such a strong moral and social norm, parties may be biased against breach even in these idealized cases.

Subsequent sections of this Article will review behavioral literature and offer new empirical findings to suggest that liquidated-damages clauses may offer a means of debiasing subjects against breach. This debiasing can, in turn, help reconcile the conflict between the moral incentives to keep a promise and the economic incentives of efficient breach.

B. *Liquidated Damages in Contract Law*

Parties to a contract may stipulate the amount of damages in the event of breach, subject to at least two, and sometimes more, constraints. The first is that the actual damages must be difficult to prove.⁴² The second is that the damages must be reasonable at the time of drafting the contract.⁴³ Some courts have also, or alternately, required that the liquidated damages not be substantially different from the actual loss, measured subsequent to the breach.⁴⁴ A liquidated damages clause must be formulated to compensate the

40. *Id.*

41. Cass R. Sunstein, *Moral heuristics*, 28 BEHAV. & BRAIN SCI. 531 (2005).

42. See RESTATEMENT (SECOND) OF CONTRACTS § 356(1) (1981) (“Damages for breach by either party may be liquidated in the agreement but only at an amount that is reasonable in light of . . . the difficulties of proof of loss.”); see also *Banta v. Stamford Motor Co.*, 92 A. 665, 667 (Conn. 1914) (“The damages to be anticipated as resulting from the breach must be uncertain in amount or difficult to prove . . .”).

43. RESTATEMENT (SECOND) OF CONTRACTS § 356; see also FARNSWORTH, *supra* note 18, § 12.18, at 814 (“The time as of which the forecast of loss must be judged . . . has traditionally been regarded as the time when the contract was made, not the time when the breach occurred.”).

44. See, e.g., *Kimbrough & Co. v. Schmitt*, 939 S.W.2d 105, 109 (Tenn. Ct. App. 1996) (“[A] wide disparity between the stipulated damage amount and actual damages may indicate that a damage forecast was unreasonable . . .”).

nonbreaching party, rather than to impose a penalty on the would-be breacher. Just as punitive damages are not permitted at the time of breach, a liquidated-damages clause is invalid if it has the intent or the function of punishing the breacher.⁴⁵

This rule is the subject of considerable academic debate, and some states are in fact more liberal in their approach to liquidated damages than others.⁴⁶ Nonetheless, the broader principle that the liquidated damages should represent an attempt to quantify losses in advance, rather than set a punishment for nonperformance, remains settled law.⁴⁷ Legal scholars have argued that there are justifications for the special scrutiny afforded to liquidated-damages clauses apart from the principle of compensation. Permissive readings of liquidated-damages clauses may systematically disadvantage less sophisticated, less informed, or otherwise less powerful parties.⁴⁸ If one party has some private knowledge of a large probability of breach, or is more savvy about the background laws, she may be able to insert a penalty clause that the other party either ignores (thinking breach is unlikely) or mistakenly believes to be the legal rule. Others have argued, however, that fear of imbalance in bargaining power alone does not justify the rule.⁴⁹ In theory, at least, a contract that purported to penalize one party unfairly would be problematic on grounds of unconscionability.⁵⁰

45. See RESTATEMENT (SECOND) OF CONTRACTS § 356 (“A term fixing unreasonably large liquidated damages is unenforceable on grounds of public policy as a penalty.”); see also FARNSWORTH, *supra* note 18, § 12.18, at 811 (“[T]he law’s goal on breach of contract is not to deter breach by compelling the promisor to perform, but rather to redress breach by compensating the promisee.”).

46. For example, under Texas law, liquidated damages are unenforceable as penalties unless the anticipated damages are difficult to estimate, the stipulated damages are a reasonable forecast, and the stipulated damages are not disproportionate to the actual damages as measured at the time of breach. *E.g.*, *Bear Stearns Gov’t Sec., Inc. v. Dow Corning Corp.*, 419 F.3d 543, 549–50 (6th Cir. 2005) (quoting *Thanksgiving Tower Partners v. Amos Thanksgiving Partners*, 64 F.3d 227, 232 (5th Cir. 1995)). By contrast, Illinois courts have required only that parties show that the damages are reasonable in light of the anticipated loss or the actual loss. *E.g.*, *Kinkel v. Cingular Wireless LLC*, 857 N.E.2d 250, 268 (Ill. 2006) (quoting *H&M Commercial Driver Leasing, Inc. v. Fox Valley Containers, Inc.*, 805 N.E.2d 1177, 1188 (Ill. 2004)).

47. The Restatement affirms the distinction between liquidated damages and penalties in section 356. *But see* Larry A. DiMatteo, *Penalties as Rational Response to Bargaining Irrationality*, 2006 MICH. ST. L. REV. 883 (arguing that penalty clauses should be enforced insofar as they counteract biases in negotiation); Goetz & Scott, *supra* note 4, at 578 (arguing that “in the absence of evidence of unfairness or other bargaining abnormalities, efficiency would be maximized by the enforcement of the agreed allocation of risks embodied in a liquidated damages clause”); Schwartz, *supra* note 3 (arguing that there is no justification for treating penalty clauses differently than other contract terms).

48. For a general discussion of the history of the penalty doctrine as a response to penal bonds, see William H. Loyd, *Penalties and Forfeitures*, 29 HARV. L. REV. 117 (1915).

49. See, *e.g.*, Samuel A. Rea, Jr., *Efficiency Implications of Penalties and Liquidated Damages*, 13 J. LEGAL STUD. 147, 160 (1984) (arguing that if there is a procedural deficiency in the formation of the contract, the doctrine of unconscionability would apply).

50. See *id.*

C. Economic Analysis of Liquidated Damages

An alternate justification for the scrutiny of liquidated damages is the economic argument that penalty clauses will deter efficient breaches.⁵¹ A penalty clause is essentially a liquidated-damages clause that requires over-compensatory damages in the event of breach. Liquidated-damages clauses come under scrutiny because judges must determine if they are in fact penalties rather than reasonable estimates of the promisee's expected benefit. If the parties agree to a contract that will make them each better off by \$1000, and one party is offered another opportunity that will give her a \$3000 profit, surely the Pareto-optimal solution is to pay \$1000 to the first party and make a total profit of \$2000. However, if the first contract had specified damages at a level of, say, \$2000, there would be no incentive to accept the second offer, an offer that would make some people better off and no one worse off. Although it is true that this would be an inefficient state of affairs, it is also true that contract law permits a number of inefficiencies, and usually leaves it to the parties to decide how to allocate the benefits and risks of a given bargain. The suspicion of liquidated damages is unusual in this respect.

In fact, the economic rationale for prohibiting penalty clauses has been disputed on its own terms. In his *Lake River Corp. v. Carborundum Co.* opinion, Judge Posner argued that penalty clauses may be economically justified as a means of facilitating efficient agreements by "making the promisor and his promise credible" but also by reflecting the parties' own judgments upon weighing of the costs and benefits of the bargain.⁵² Charles Goetz and Robert Scott have also argued for the efficiency of penalty clauses.⁵³ Professors Goetz and Scott write that a penalty clause may represent the best effort of the parties to allocate risk, especially where a breach may result in noncompensable losses. In this model, the penalty clause serves as a kind of insurance, for which the promisor is the most efficient insurer. Penalty clauses are efficient insofar as they reduce transaction costs and make explicit the value of the bargain to each party, especially if that value may be difficult to prove. Furthermore, underlying the efficiency arguments is the notion that some penalty clauses are supported by an economic rationale because they may encourage parties to make beneficial contracts that they would not otherwise make.⁵⁴ These arguments provide a good starting point for behavioral researchers, insofar as they ask how parties might use liqui-

51. Goetz & Scott, *supra* note 4, at 562.

52. 769 F.2d 1284, 1289 (7th Cir. 1985).

53. Goetz & Scott, *supra* note 4, at 578 ("In the absence of evidence of unfairness or other bargaining abnormalities, efficiency would be maximized by the enforcement of the agreed allocation of risks embodied in a liquidated damages clause.").

54. *Id.* at 583 ("In sum, many people may not want to make deals unless they can shift to others the risk that they will suffer idiosyncratic harm or otherwise uncompensated damages. To the extent that the law altogether prevents such shifts from being made or reduces their number by unnecessarily high costs, it creates efficiency losses; that is, it prevents some welfare-increasing deals from being achieved.").

dated-damages clauses to clarify their intentions when they form agreements.

Alan Schwartz has argued that courts should enforce liquidated-damages awards because parties have no rational motivation to contract for supra-compensatory remedies.⁵⁵ He observes that in a competitive market or when well-informed parties bargain, the promisee prefers expectation damages because the contract price is higher if the promisor risks paying a penalty. As long as the penalty deters breach, the promisee will have paid extra for a fixed gain from performance. Other authors have also noticed that when a competitive market exists, parties have no incentive to sign a socially inefficient contract (like a contract with a penalty clause).⁵⁶ Economists have used theoretical models to show that stipulated damages are actually better able to correct for inefficiencies than court-imposed remedies.⁵⁷

D. Bounded Rationality and Liquidated Damages

Economic analyses of the effects of penalty clauses assume that parties are constrained by the background legal rules but otherwise will behave as rational wealth-maximizing agents. However, behavioral research suggests that moral or social norms may be more salient than legal rules, and, further, that wealth maximization will not be the only or even primary goal of the agents. I have reviewed evidence to suggest that the moral and social implications of breaching a contract may be severe enough that most people will, in a sense, penalize themselves by forgoing lucrative opportunities. In this section, I explore the possibility that liquidated damages—and even penalty clauses—might encourage parties to breach in cases in which they would otherwise follow the moral rather than the legal or economic rule.

The term “bounded rationality” refers to the notion that people, unlike perfect (and imaginary) rational agents, have limited cognitive resources, and therefore make some predictable reasoning errors that are not otherwise incorporated into economic models of behavior. Melvin Aron Eisenberg uses principles of cognitive psychology to identify flaws in the law and economics justifications of penalty clauses.⁵⁸ He argues that, given limited ability to imagine all of the possible manifestations of breach, and the concomitant optimistic belief by most parties that they will perform as specified, the incentive to deliberate carefully over a liquidated-damages

55. Schwartz, *supra* note 3, at 405.

56. See Kathryn E. Spier & Michael Whinston, *On the Efficiency of Privately Stipulated Damages for Breach of Contract: Entry Barriers, Reliance, and Renegotiation*, 26 RAND J. ECON. 180, 198 (1995) (“[W]ith a competitive entrant, the buyer and seller not only have an incentive to sign a socially efficient contract, but can also achieve the first best using a relatively simple stipulated damage contract that sets damages equal to the efficient expectation damage.”).

57. *Id.*

58. Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract*, 47 STAN. L. REV. 211 (1995).

clause is low.⁵⁹ As such, a rule that assesses the damages from the point of view of the parties' best estimate of actual losses *ex ante* will serve only to exacerbate the problem. Rather, liquidated damages should be compared with real losses after the breach has occurred, and that comparison should determine the court's decision unless there is a reason to think that the liquidated-damages clause was deliberately intended to encompass the circumstances of the breach in question.⁶⁰

I would like to briefly offer evidence from other cognitive research that suggests the opposite conclusion—that in fact liquidated-damages clauses look even better in light of findings of bounded rationality. The benefit of stipulating damages is that drafting such a provision may force parties to deliberate about the expected benefit of the contract in a way that would otherwise be cursory or confused. I suggest three common cognitive limitations that reinforce this view, and I take these to be examples rather than an exhaustive list.

When parties specify the amount of damages in the event of breach as part of a contract, they may be forced to do some cost-benefit calculations that they would have otherwise neglected. Numeracy, or familiarity and comfort with manipulating and interpreting numeric information, is often vital for decisionmaking.⁶¹ Specifying the gross benefit of the contract and then subtracting out the cost to the promisee is potentially an important process for helping to clarify the expected value of the contract to both parties. And, in fact, some psychological research indicates that individuals who were otherwise making a decision without the benefit of cost-benefit calculations can be prodded into more rational decisions just by asking them to perform the relevant arithmetic functions.⁶² Framed in terms of heuristic versus deliberative processing,⁶³ liquidated damages may push the parties to deliberate about the expected value and possible risks entailed by the contract, rather than assessing the value by means of an affective snapshot.⁶⁴ These concerns are minimized, if not erased, for business-to-business con-

59. *Id.* at 227 (arguing that “at the time the contract is made it is often impracticable, if not impossible, to imagine all the scenarios of breach”).

60. *See id.* at 228.

61. *See* Ellen Peters et al., *Numeracy and Decision Making*, 17 *PSYCHOL. SCI.* 407, 407 (2006) (reporting a number of studies that show that “the ability to comprehend and transform probability numbers relates to performance on judgment and decision tasks”).

62. *See, e.g.*, Jonathan Baron, *Confusion of Group Interest and Self-Interest in Parochial Cooperation on Behalf of a Group*, 45 *J. CONFLICT RESOL.* 283, 293 (2001) (finding that participants in an experiment were less likely to show a bias toward in-group members when they were asked to calculate the expected benefit of contributing to in-group members versus out-group members).

63. *See, e.g.*, Sunstein, *supra* note 41, at 533 (applying the notion of dual-system processing—deliberative and heuristic—to moral reasoning).

64. *See, e.g.*, Paul Slovic et al., *The Affect Heuristic*, in *HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT* 397, 400 (Thomas Gilovich et al. eds., 2002) (“Using an overall, readily available affective impression can be far easier—more efficient—than weighing the pros and cons or retrieving from memory many relevant examples, especially when the required judgment or decision is complex or mental resources are limited.”).

tracts that involve accountants, lawyers, and institutional actors. But many contracts will involve at least one party (say, a homeowner in a contract for home renovation) who is not in the habit of thinking about the value of goods and services in terms of a cost-benefit calculation.

Second, weighing the costs and benefits of a choice potentially requires parties to assign numbers to goods that they do not normally think of in economic terms. That is, even if people are good at math (numeracy), they may neglect to assign numeric values to the goods implicated in a contract. What is my profit on the enjoyment of a new kitchen or a piece of artwork? What is the cost of having workers in my house for a month or waiting another year for a delivery? Of course it is far from impossible to calculate a value for these goods—but that does not mean that it is easy or intuitive. Behavioral researchers have discussed the difficulty of turning an affective impression into a dollar value in the context of jury awards.⁶⁵ Some values are not easily measured, especially when the promisee will benefit from nonmonetary consequences of performance. There are many ways to figure this out: people can try to discern their willingness to pay for a service, they can compare prices from other service providers, or they can try to assign a dollar value to the expected benefit. But these are not necessarily intuitive processes, and not everyone will be motivated to work out the expected value of a contract. Evaluating the value of a service like renovation should not be particularly difficult—a couple of alternate estimates could provide a helpful benchmark—but could help parties clarify the value of the contract to themselves and one another.

A third cognitive benefit of a liquidated-damages clause is that it asks parties to think about fair compensation for breach at a time when they are not inclined toward punishment for the moral outrage of breaking a promise. In a previous paper, I found that subjects were inclined to set the penalty for breach at a lower amount when they were asked to draft a liquidated-damages clause than when they were asked, *ex post*, to determine the appropriate level of damages for breach.⁶⁶ I argued that the difference between negotiating for the penalty in the event of breach and deciding on a penalty after the fact has to do with the salience of the moral harm.⁶⁷ Levying damages after the breach as a *fait accompli* makes the task more about assigning blame than allocating rights and duties.

In the following section, I argue that there is another important psychological benefit to liquidated damages. A body of research from experimental economics has shown that parties rely less on social norms to guide their decisions when sanctions for noncooperative behavior are explicit, like

65. See Daniel Kahneman et al., *Shared Outrage and Erratic Awards: The Psychology of Punitive Damages*, 16 J. RISK & UNCERTAINTY 49, 53 (1998) (citing evidence that although people have very similar judgments of the moral outrageousness of a given act, when they are asked to express that outrage in a dollar scale, it results in an “extremely noisy expression of punitive intent,” and awards are erratic and unpredictable).

66. Wilkinson-Ryan & Baron, *supra* note 11, at 415–17 (Experiment 2).

67. *Id.*

liquidated damages, rather than implicit, like the default rule of expectation damages.

II. BEHAVIORAL ECONOMICS OF INCOMPLETE CONTRACTS

Incomplete-contracts scholarship offers a useful framework for analyzing the role of liquidated damages. One way to think about the difference between contracts with and without liquidated damages is as a difference in completeness. The literature on incomplete contracts provides useful insights for thinking about liquidated damages, inasmuch as a contract is arguably incomplete whenever it does not specify the contingencies and costs of breach. I first review economic and legal approaches to incompleteness. Then, I suggest a number of relevant results from empirical accounts of incomplete contracts. Experimental-economics games show that when contracts are not fully specified, parties rely on social norms to guide their behavior. The role of social norms is diminished, though, when a monetary sanction for noncooperative behavior is introduced.

A. Law and Theory of Incomplete Contracts

The doctrine of incomplete contracts allows for two possibilities when relevant terms or contingencies are not specified in the contract: either no enforceable contract exists, or the gaps can be filled using default rules of one kind or another.⁶⁸ However, as many commentators have noticed, most contracts are incomplete, so the possibility of having no enforceable contract in all these cases is unrealistic.⁶⁹ For the purposes of this discussion, I am interested in a form of incompleteness that will rarely render the contract unenforceable, namely, the absence of stipulated damages. In the case of this kind of incompleteness, the default rule is expectation damages (and perhaps consequential damages if they are relevant). I will focus attention on the psychological relationship between the default rule, the explicit terms of the contract, and the background norms of contract and promise.

Legal scholars have argued that for reasons of flexibility, or cost-effectiveness (lower transaction costs), or even strategy, parties may neglect to specify one or more terms under the assumption that the legal default rule will apply.⁷⁰ In other words, incompleteness is often purposeful and effi-

68. See, e.g., Omri Ben-Shahar, "Agreeing to Disagree": Filling Gaps in Deliberately Incomplete Contracts, 2004 Wisc. L. REV. 389, 389 (noting that courts look to the importance of the indefinite terms, striking down a contract with important terms that are not specified and filling gaps when they are less important).

69. See, e.g., Edward Lorenz, *Trust, contract and economic cooperation*, 23 CAMBRIDGE J. ECON. 301, 301 (1999) ("[The] vision of a world governed by comprehensive agreements had always been difficult to reconcile with the pervasiveness of incomplete contracts in the real world . . .").

70. See Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms*, 73 CAL. L. REV. 261, 262 (1985) (noting the assumption that "implied terms expand contractors' choices by providing standardized

cient. The principle of expectation damages serves as a kind of default rule that parties can contract around (to a limited extent) with liquidated damages. In their discussions of incomplete contracts, legal scholars have made assumptions about how parties understand and respond to default rules. Default rules are important, not only because of their substantive contributions to the terms of a contract, but because of the incentive effects that they have on parties drafting the contract. Some legal and economic scholars have argued that default rules should try to mimic terms that the parties would have drafted or agreed to themselves.⁷¹ This argument assumes that when default rules are reasonably in accordance with the parties' own preferences, the parties will prefer to leave gaps in the contract and rely on the defaults, as long as it is costly to negotiate and draft terms. A second school of thought on default rules takes the opposite tack and argues that at least some default rules should be terms that parties will almost never want.⁷² Or, more specifically, that default rules should be aimed at parties who would otherwise have incentives to leave a contract incomplete for strategic reasons—for example, a party may be able to manipulate his share of the surplus by withholding some information. The idea is that when parties are faced with disadvantageous but optional default rules, they will prefer to draft explicit provisions.

Central to these arguments is the idea that default rules matter because they affect whether parties draft explicit terms and how parties understand their rights and obligations under a contract. In some cases—perhaps many cases—the default rules are irrelevant. When a contract is incomplete, parties have the ability to renegotiate the underspecified obligations at a later date. The opportunity to renegotiate the terms makes the default rule less important, under an economic analysis. Richard Craswell has expounded on this point using a particularly relevant example, the case of a high damage remedy.⁷³ If it is in the promisor's interest to breach, for example, the promisor should be able to pay the promisee some amount greater than the value of performance to the promisee but less than his own cost of performance. This idealized transactional structure minimizes the importance of default rules for incomplete contracts, but relies very heavily on assumptions of rational agency that may not bear out in the real world.⁷⁴

and widely suitable 'preformulations,' thus eliminating the cost of negotiating every detail of the proposed arrangement" (footnote call mark omitted).

71. See Frank H. Easterbrook & Daniel R. Fischel, *Corporate Control Transactions*, 91 YALE L.J. 698, 702 (1982) (arguing that the optimal default rule in the investor-manager relationship is one that they would have contracted for under conditions of costless bargaining).

72. See Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87, 91 (1989) (arguing that, to incentivize parties to bargain more fully, "penalty defaults" should sometimes apply, with terms neither party would want).

73. Richard Craswell, *The "Incomplete Contracts" Literature and Efficient Precautions*, 56 CASE W. RES. L. REV. 151, 159 (2005).

74. For another discussion of the implications of rational agency for incomplete-contracting theory, see Jean Tirole, *Incomplete Contracts, Where Do We Stand?*, 67 ECONOMETRICA 741, 744 (1999) (arguing that unforeseen contingencies are part of the expected-utility calculation of rational actors drafting a contract).

B. Behavioral Economics of Incomplete Contracts

Where a contract is incomplete, the economic assumption is that parties will either rely on the default rule or behave strategically and negotiate for optimal terms. There is another possibility, one that a number of behavioral researchers have begun to address: when parties omit terms from the contract, they may assume that the relevant framework for their obligations is trust.⁷⁵ That is, the parties trust that they are both bound by the same set of social norms, including promise keeping and reciprocity.

I have invoked the idea of norms frequently in this Article, and at this point it is worth taking the time to elaborate on the concept of norms, because the definition will shed some light on the role of sanctions. I will draw on Cristina Bicchieri's rational reconstruction of social norms.⁷⁶ The norm exists if the subject knows that the norm applies to certain situations, and the subject prefers to conform to the norm, on the following conditions: first, the subject must believe that it is empirically true that people generally conform to this norm; and second, that the subject believes that other people *expect her to conform* to the norm in these types of situations.⁷⁷ Under Bicchieri's reasoning, there are three reasons that sanctions could affect behavior normally guided by social or moral norms. First, it might permit people to believe that the norm does not apply to a given situation.⁷⁸ Second, it could change the perception of other people's conformity to the norm.⁷⁹ And, third, it could change the subject's "normative expectations," or her beliefs about what others expect her to do.⁸⁰

Bicchieri calls this final requirement the conditional preference based on "normative expectations," and it is an especially important concept in the domain of liquidated damages. Laws have normative weight and expressive function. When a judge orders a breacher to pay expectation damages, it carries with it a kind of stigma. When the damages are provided by the legal system, it seems that the normative expectations of the party are performance, not breach. When the penalty for breach is contained within the contract, the would-be breacher knows that the other party has considered the possibility of breach and set a reasonable price for it. Both parties understand the rules of the transaction, and those rules include the possibility of nonperformance. In this case, the normative expectations are, at the very least, less obvious to the parties than in the alternative case.

75. See, e.g., Iris Bonhet et al., *More Order with Less Law: On Contract Enforcement, Trust, and Crowding*, 95 AM. POL. SCI. REV. 131, 131 (2001); Deepak Malhotra & J. Keith Murnighan, *The Effects of Contracts on Interpersonal Trust*, 47 ADMIN. SCI. Q. 534, 534 (2002).

76. See CRISTINA BICCHIERI, *THE GRAMMAR OF SOCIETY: THE NATURE AND DYNAMICS OF SOCIAL NORMS* 11–16 (2006).

77. *Id.*

78. *Id.*

79. *Id.*

80. *Id.*

Useful demonstrations of the role of norms and sanctions can be found in the experimental-economics literature. For example, economic experimenters used a game in which players repeatedly interacted with one another under conditions of incomplete contract.⁸¹ This game was modeled on an employer-employee relationship. One player was the employer and the other was the worker. The employer offered some amount to the worker, ranging from a minimum wage to a generous wage, and the worker then offered some amount of “effort” in return. Effort was costly to the worker but profitable to the employer. In the main treatment, players did not meet one another, so all choices were anonymous. The economic prediction was that the worker would return the minimum amount (minimal effort) to the employer. The employer, expecting this selfishness, would offer the minimum wage in the first case. In fact, the experimenters found that the dominant pattern was reciprocal behavior, and that the reciprocity was intrinsic rather than driven by any particular experimental manipulation (including social-approval incentives or more iterations of the game).⁸² This means that employers offered an amount significantly above the minimum wage and workers returned an effort significantly greater than the lowest possible effort. Although the contract was incomplete—that is, it did not specify how much the employer had to pay or how much effort the employee had to contribute—the parties behaved as though the social norm of reciprocity were built into their contract, and high wages led to high effort.

Other studies have found that when contracts are incomplete, “the contracting parties form long-term relations and the provision of low effort or bad quality is penalized by the termination of the relationship.”⁸³ In other words, when contracts are incomplete, the unhappy parties do not turn to the court to enforce money damages or renegotiate the terms; they end the business relationship. Another way to think about this is that parties use social norms even to navigate the breach: if I trust a friend and I am betrayed, the typical result is that I terminate the relationship with the friend, and (perhaps) the friend loses some of her good reputation.

I have suggested that research on incomplete contracts is relevant to understanding how parties think about contracts with and without liquidated damages. The crux of the matter is the dominant role of social norms when contracts are incomplete. The social and moral norm of promise keeping is central to how parties conceive of their contractual obligations. However, contracts need not leave the question of remedies unanswered, and there is evidence to suggest that when sanctions are explicit, parties are less likely to conform to social norms.

81. See Armin Falk et al., *Intrinsic motivation and extrinsic incentives in a repeated game with incomplete contracts*, 20 J. ECON. PSYCHOL. 251 (1999).

82. *Id.* at 256–71.

83. Martin Brown et al., *Contractual Incompleteness and the Nature of Market Interactions*, (Inst. for Empirical Research in Econ., Univ. of Zurich Working Paper No. 38, 2002), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=305707.

C. Small Sanctions and Social Norms

The social norm of promising requires performance, but the economic incentive in efficient-breach situations weighs in favor of breach. Results from behavioral experiments suggest that, when a self-interested goal is in conflict with a social norm, self-interest wins more often if there is a mild, explicit sanction for noncooperation.⁸⁴ Stipulating damages is a means of making the penalty for breach more explicit, which in turn permits parties to breach the contract without, arguably, breaking the internal rules of the agreement. Breaching does not mean repudiating the transaction altogether; it just involves one of a number of contingencies envisioned within the agreement.

Literature on the effect of small sanctions on cooperation shows that when sanctions are not severe enough to deter noncooperative behavior, self-interested behavior increases as compared to a baseline condition of no sanctions.⁸⁵ My suggestion is that breach is like noncooperation (though in efficient breach cases, it is both welfare maximizing and Pareto optimal, so it is not “noncooperative” in quite the same way), insofar as it is in conflict with dominant moral and social norms. When breach is efficient, liquidated damages are akin to small or moderate sanctions: they make the penalty explicit and therefore salient to the parties, but they are not large enough to deter breach on the straightforward cost-benefit calculation.

This effect was memorably illustrated in a clever field experiment. Uri Gneezy and Aldo Rustichini conducted an experiment on small sanctions using a fine for late pickups at a group of Israeli day cares, and found parents were, oddly, *more* likely to be late to pick up their children when there was a fine.⁸⁶ The experiment was structured as follows: The researchers identified ten day cares in the city of Haifa that were very similar to one another in terms of the size and demographics of the children and the fees for attendance. The researchers collected data for a total of twenty weeks. In the first four weeks they just counted the number of late pickups at each center each day. At week five, they told the parents in six of the ten centers that late pickups would be subject to a fine of approximately three dollars for being ten minutes late or more. The researchers continued to count the number of late parents. After twenty weeks of observation, the researchers compared the group with the fine to the group without the fine. The group without the fine had about ten late parents per week, and that number changed very little from week to week. The group with the fine also had ten or fewer late parents per week before the fine was introduced. Once the fine

84. See, e.g., Ernst Fehr & Bettina Rockenbach, *Detrimental effects of sanctions on human altruism*, 422 NATURE 137, 138 (2003) (reporting that players in an experimental game were less likely to reciprocate altruistic behavior when a partner could use sanctions to punish noncooperative behavior).

85. See Bowles, *supra* note 10, at 1606–08.

86. Uri Gneezy & Aldo Rustichini, *A Fine Is a Price*, 29 J. LEG. STUD. 1, 7 (2000) (showing graphical evidence of the uptick over a course of twenty weeks in late-coming parents in the group of parents asked to pay a fine).

was introduced, the number of late parents per week nearly doubled. In other words, the fine had the effect of causing the behavior it was ostensibly meant to punish.

There are a number of possible explanations for this result, and they are not mutually exclusive. One possibility is that parents were uncertain of the value to the day care of promptness. By this reasoning, when the day care established a fine, the parents learned the actual value of promptness to the day care.⁸⁷ They could then do a simple cost-benefit analysis comparing the cost of late pickup to the benefit of staying late at the office, stopping for groceries without children in tow, etc. This explanation, which I will call the “information hypothesis,” is almost certainly part of the story. However, I do not think it can explain *most* of the effect, since the effect of weak sanctions seems to work even in fairly abstract games in which it is unclear how one player could think that an exogenous penalty could provide information about the value of an exchange to the other players.⁸⁸ Furthermore, this explanation should be easy enough to rule out by constructing situations in which there are no information asymmetries between parties.

A second possibility is that the sanctions “crowded out” the informal norm of courtesy, transforming an informal cooperative interaction into one that is dominated by each party’s self-interested assessment of the costs and benefits of a given move. The crowding-out hypothesis has received considerable theoretical and experimental attention.⁸⁹ Experimental-economics games have repeatedly found that players in a game requiring cooperation for the best overall results are more cooperative when there is no penalty for defection and less cooperative when there is a small penalty for defection.⁹⁰ In fact, some research suggests that, when a game is fully described in terms of rewards and penalties, parties attribute one another’s behavior to self-interest rather than cooperation.⁹¹ The theory proposes that, when a transaction is described in terms of monetary rewards and penalties, the parties to the transaction stop depending on social or moral norms to make their decisions or judgments.⁹² The explicit rules “crowd out” the implicit norms—much as explicit terms in a contract replace default rules.

In a particularly relevant example, experimenters used a game modeled on contractual relationships to show that moderate sanctions can crowd out

87. *Id.* at 10–11.

88. *See* Fehr & Rockenbach, *supra* note 84, at 138 (showing the detrimental effects of small sanctions in a trust game in which penalties were assigned by the experimenter).

89. *See, e.g.*, Bruno S. Frey, *Does Monitoring Increase Work Effort? The Rivalry with Trust and Loyalty*, 31 *ECON. INQUIRY* 663, 665 (1993) (arguing that when a worker is subject to intensive monitoring, the intrinsic motivation is “crowded out” insofar as the monitoring indicates distrust).

90. *See, e.g.*, Houser et al., *supra* note 6, at 517 (showing in a trust game that when investors can enforce sanctions to enforce their requests, trustees return less than when the investors cannot enforce sanctions).

91. *See* Malhotra & Murnighan, *supra* note 75, at 540 (finding that players developed more interpersonal trust in a game with nonbinding contracts than in a game with binding contracts).

92. *See* Gneezy & Rustichini, *supra* note 86, at 13–14 (noting the importance of social norms of courtesy when there are no specified sanctions).

the norm of reciprocity.⁹³ In this game, the first player could offer a small sum to the second player. If the second player chose to “perform,” both players would get a reward. If the second player “breached,” one of two possible outcomes occurred. One outcome, which the authors describe as an unenforced contract, was that the second player would receive a large reward and the first player a nominal amount. The other possible outcome was the players would receive the same payouts that they would have received had the second player performed. In this game, the enforceability of the contract varied. This means that subjects understood that in the event of breach, there was a 10%, 50%, or 90% chance that the experimenters would enforce the contract. The authors found that individuals performed when the enforcement was strong or when it was very weak, but not when it was moderate—that is, strong enough to be a salient element of the game but weak enough that defection was still the dominant strategy. The authors concluded that when the enforceability was so low as to be almost negligible, players understood that the rules of the game would conform to the moral norm of reciprocity.⁹⁴ When the enforcement was so high as to be almost absolute, there was no point in breaching. But when the enforcement was in the middle, it crowded out the moral norm without introducing a penalty heavy enough to deter selfish behavior.

In this Article, I offer a refinement of the crowding-out hypothesis. It is possible to understand the agreement between the day care and the parents as a kind of contract. The agreement is that the parents will pay tuition and pick up their children on time, and in return the day care will take good care of the children. Once the sanction is introduced, the parties understand their agreement to include a mutually recognized, mutually agreeable provision for a certain type of breach. The implication of a crowding-out explanation is that the explicit incentive structure shifts attention away from a social norm and toward the costs and benefits of a given move. But I think that the contracts hypothesis I am suggesting here has room for both social norms *and* efficiency incentives. The introduction of sanctions changes the players’ understanding of the game (or the contract, as the case may be), and, crucially, changes what players believe others expect from them.

When a contract does not specify damages in the event of breach, it is incomplete,⁹⁵ or at a minimum less complete than a contract that does stipulate damages. Research on incomplete contracts shows that when a term (like damages) is unspecified, parties will assume that moral or social norms are determinative. The moral norm in the realm of promising requires performance. In many cases, this norm is probably quite useful. Contracts that are not breached are not the subject of litigation, they do not erode interpersonal trust, and there are no problems with inadequate compensation.

93. Bohnet et al., *supra* note 75.

94. *Id.* at 141.

95. See, e.g., Steven Shavell, *Is Breach of Contract Immoral?*, 56 EMORY L.J. 439, 446–48 (2006) (arguing that most contracts are incomplete because they do not identify the parties’ intentions in the event of different possible breach scenarios).

However, there are certainly cases of efficient breach in which social welfare is maximized via breach. In those cases, it would be useful to identify a mechanism to help parties navigate around the social norm. My suggestion here is that stipulating the damages in the body of the contract will help parties reconceptualize their obligations in such a way that they are willing to exploit efficient-breach opportunities. When a contract includes a liquidated-damages clause, the internal rules of the transaction include a provision for nonperformance. Such a clause not only lets a would-be breacher think about breach without invoking the norm of promising, but changes each party's understanding of what the other person expects. Therefore, my prediction is that, when the incentives are such that breach is efficient and Pareto optimal, people will be more willing to breach a contract with a liquidated-damages clause than a contract that does not speak to the question of damages.

In the following experiments, I test the effect of liquidated-damages clauses on parties' willingness to breach contracts, as well as parties' intuitions about how a liquidated-damages clause affects the moral implications of breach.

III. EXPERIMENTS: LIQUIDATED DAMAGES AND EFFICIENT BREACH

A. Experiment 1: The Effect of Liquidated Damages on Willingness to Breach

The three studies reported in this Article use very similar methods, so I will describe the method of the first study in particular detail, and then describe the latter two studies in reference to the first. Subjects in all studies in this Article (with one exception in Section 2, which is noted) were members of a panel recruited over a ten-year period, mostly through their own efforts at searching for ways to earn money by completing questionnaires. Approximately 90 percent of respondents were U.S. residents (with the rest mostly from Canada). The panel is roughly representative of the adult U.S. population in terms of income, age, and education⁹⁶ but not in terms of sex, because (for unknown reasons) women predominate in this respondent pool.

For each study, an email was sent to about 500 members of the panel, saying how much the study paid and where to find it on the World Wide Web. Each study was a series of separate web pages, programmed in JavaScript. The first page provided brief instructions. Each of the others presented a case, until the last, which asked for (optional) comments and sometimes contained additional questions. Each case had a space for optional comments. (I report some comments in the discussion of the results to suggest possible conclusions and implications of the quantitative results. Because they were optional, comments were not coded and analyzed

96. For a statistical profile and analysis of the panel of subjects used in these studies, see Linda Babcock et al., *The Propensity to Initiate Negotiations: Toward a Broader Understanding of Negotiation Behavior*, (unpublished manuscript, on file with the *Michigan Law Review*).

systematically.) Otherwise the subject had to answer all questions to proceed. The study was removed when about 100 responses had been submitted in each case.⁹⁷

The goal of the first study was to determine whether and how a liquidated-damages clause would affect participants' attitudes toward breach of contract. I created two contract scenarios, and each scenario had a liquidated-damages version ("LD") and a version in which there was no liquidated-damages clause ("Control"). One scenario described a contract for the rental of a restaurant space for a party. The other involved a contract for a training seminar between a temp agency and an IT firm.

In this study, subjects were divided randomly into two groups, the LD group and the Control group. The LD group saw the items in the following order: IT seminar (LD condition), Party rental (LD condition), IT seminar (Control), Party Rental (Control), Probe. The Control group saw the same screens, but they saw the two Control versions before the LD versions. This design permitted both the primary between-subjects analysis as well as the secondary within-subjects analysis. In other words, I was primarily interested in how the LD group responded to the LD items, which they saw first, and how the Control group responded to the Control items, which they saw first. That is the between-subjects analysis, in that I am comparing one group of subjects to another. Subjects' responses to the items in a between-subjects design are formulated without respect to the other condition, so their responses are based entirely on their initial intuitions about the scenario rather than their attempts to be consistent with their responses or to figure out the experimenter's hypothesis. The between-subjects analysis gets at subjects' implicit intuitions about liquidated damages and breach of contract; I was also interested in their explicit moral reasoning. As such, I also used some within-subjects elements in this design. I showed subjects the same scenarios in each of the conditions, so that they could consciously consider whether the liquidated-damages clause would affect their answer. The study also included a probe page at the end, which means that subjects reread both versions of one of the scenarios, and I asked them a series of questions intended to probe their explicit intuitions and attitudes about the moral relevance of the liquidated-damages clause.⁹⁸

97. The studies are all available at <http://finzi.psych.upenn.edu/~baron/ex/tess/>. Experiment 1 is available under the name "con13," Experiment 2 under "con17," and Experiment 3 under "con14."

98. The questions asked subjects to reconsider both conditions of one scenario, and then to answer the following questions for each case (questions of extent were measured on a scale of one to five; subjects filled in the number 0–100 for the percentage questions):

To what extent is it immoral to breach your contract?

To what extent does it make good financial sense to breach your contract?

What percentage of people do you think would break the contract?

How guilty would you feel if you broke the contract?

If you breached your contract and compensated [the promisee], how upset do you think [the promisee] would be?

The hypothesis of this study was that subjects would be more willing to breach a contract with a liquidated-damages clause than a contract with an otherwise identical damages award specified by the law of contracts. To assess subjects' willingness to breach a contract, I asked them to put themselves in the place of the promisor. They were told the expected benefit to themselves of the given contract, as well as the money damages that they would have to pay in the event of breach, and asked to report the least amount of money that they would accept to breach the contract. The Party Rental scenario in the LD condition read as follows:

Please imagine that you own a small restaurant, which you sometimes rent out for private parties. The Wilsons want to rent your restaurant for a party. Similar venues cost about \$2000. For you, the event is pure profit, since you would normally be closed anyway. You settle on a price of \$1000 for the night and sign a basic contract with the Wilsons, agreeing to the date, the time, and the price. The contract also includes the following clause:

If the restaurant becomes unavailable or unusable for any reason, Mr. and Mrs. Wilson will be compensated. Required compensation in the event of such a breach will be set at \$1000.

Two weeks before the Wilsons' party, a famous rock band calls to ask if they can rent your place out for the night the Wilsons have booked. Because your restaurant is very close to the concert venue, the band is willing to pay much more than usual.

As specified by the contract, if the venue is not available for the party, you will have to pay the Wilsons \$1000.

You were expecting a \$1000 profit for this night. The band is willing to offer you much more. Given that you have to pay the Wilsons \$1000, what is the smallest amount the band could offer such that you would accept their offer?

In the Control condition, there was no liquidated-damages clause. Instead of reading that they would have to pay \$1000 "as specified by the contract," they were given the following instructions: "Assume that if you break your contract with the Wilsons, the law of contracts will require that you pay them \$1000 as compensation."

In the other scenario, called "IT Seminar" subjects read the following:

Please imagine that you own a small technology consulting firm. One of the things your firm does is provide trainings to businesses on different computer applications. You have recently been called by a temp agency to train a group of temporary workers on a data storage program. The agency has been hired to do a week-long filing project for a local law firm, and the firm has offered them an extra \$2000 if the workers can use this program. You charge \$1000 for the training. Because you were not planning to work that day and have all the materials, the job is pure profit for you. You sign a

When considering whether or not to accept the new offer, to what extent would you predict that breaching the contract and compensating [the promisee] would have a negative effect on your reputation?

contract, agreeing on the date, the place, and the price. The contract also includes the following clause:

If either party to this contract is unable or unwilling to fulfill his obligations, he will be required to compensate the other party. Required compensation in the event of breach will be set at \$1000.

A week before you are scheduled to start the training, an out-of-town client calls to ask you to run a seminar for them. They need the training on Friday, the same day as your temp agency training. The out-of-town client is in a hurry and really wants to impress a big customer, and so they offer much more than your usual going rate. As specified by the contract, if you miss the Friday training, you will have to pay the temp agency \$1000 in compensation.

You were expecting a \$1000 profit. The out-of-town client is offering much more. Given that you have to pay the temp agency \$1100, what is the smallest amount the out-of-town client could offer such that you would accept that job?

In the Control condition, subjects again read that the law of contracts would require them to pay \$1000 as compensation.

1. Method

As explained above, this study was conducted using participants from a panel of respondents who take surveys on the web. In this study, ninety-nine subjects participated. Seventy-two subjects were female, twenty-seven male. The median age of respondents was forty-four. The study took most subjects less than ten minutes to complete, and subjects were paid \$3 for their participation. Subjects were divided into two groups, LD and Control. Each group saw items in both conditions, but in opposite orders. Every subject answered a series of questions on the last page about the morality of breach.⁹⁹

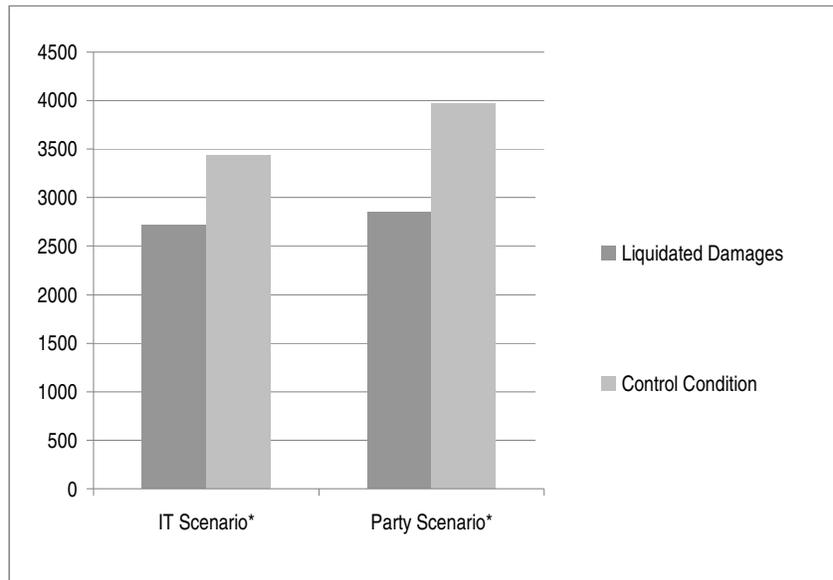
2. Results

In both scenarios, looking only at the first two items that each subject saw (that is, looking at only the between-subjects data) subjects gave a lower willing-to-accept figure (“WTA”) in the LD condition than in the Control condition.¹⁰⁰ For both scenarios, any third-party offer greater than \$2000 would have yielded a profit for the promisor. The data are presented below in chart form.

99. The results for all three experiments were analyzed with t-tests. I will report the t-value (t), the degrees of freedom (df), and the p-value (p)—the probability of finding such a result randomly if no actual difference exists—for each significance test.

100. The LD group indicated willingness to breach for much less money than the Control group for items in their respective conditions. The LD WTA responses were \$689 and \$1082 lower than the Control group in the IT seminar and party rental scenarios, respectively. To test for significance, I aggregated the scenarios and tested for an overall difference in the mean WTA response for LD scenarios and the mean response for the two Control scenarios ($t=2.582$, $df=82.392$, $p=.0116$).

FIGURE 1.
THE LOWEST OFFER SUBJECTS WERE WILLING TO ACCEPT TO BREACH A
CONTRACT WITH AND WITHOUT A LIQUIDATED-DAMAGES CLAUSE.



The data in this chart show that subjects who saw a contract with a liquidated-damages clause were more willing to breach than subjects who were told that an identical damages award was “required by the law of contracts.” In this study, willingness to breach was assessed numerically: I assume that someone is “more willing” if she requires less monetary incentive to breach.

I also compared subjects’ own responses to one another; I wanted to see if a subject in the LD group who gave a low WTA answer on the first two items would give similar answers when shown the same contract without a liquidated-damages clause, or if subjects would have the explicit intuition that it is preferable to breach a contract with a liquidated-damages clause. In this case, although the overall trend was in the predicted direction—lower WTA figures for LD scenarios—subjects were quite consistent across cases, and there were no significant differences within-subject.¹⁰¹

Finally, I asked subjects a series of questions at the end of the experiment to assess whether they perceived moral differences between the two conditions. In this study, the only significant factor reported by subjects was that promisees in the LD condition would be less upset at the breach than promisees who had signed a contract without a liquidated-damages clause.

The main result of Experiment 1 was clear: subjects preferred to breach contracts with liquidated damages than contracts with identical damages

101. Aggregating across scenarios, subjects on average indicated that they were willing to accept an offer \$114.80 lower to breach an LD contract than a Control contract, which is not significant ($t=-.509$, $df=97$, $p=.6117$).

determined by the background rule of expectation damages. I also made a first pass at assessing subjects' explicit intuitions about liquidated damages, which I explore in greater depth in Experiment 3.

B. *Experiment 2: Effect of Penalty Clause*

In the second experiment, my goal was to extend the findings of the first study to make the bolder claim that subjects implicitly prefer to breach a contract with a penalty clause than a contract for which the rule of expectation damages sets the damages amount. The hypothesis for this study is that people will prefer to breach the penalty contract even though it is more expensive to breach in that case. The setup of Experiment 2 is almost identical to Experiment 1, with the following difference. Rather than comparing two contracts with the same damages amount, in this version I added a small penalty to the LD condition. Subjects read a liquidated-damages clause that requires \$1100 in damages for a contract with an expected value to the promisee of \$1000.

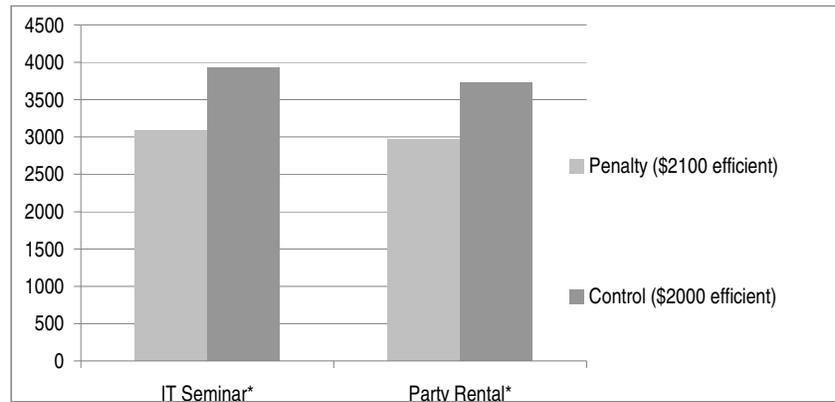
1. *Method*

Two-hundred thirty-seven subjects responded to a questionnaire on the web. In all, 24.9 percent of subjects were male. Ages ranged from 22 to 81, with a median age of 44. Subjects read two contract scenarios in each of two conditions. In the Penalty condition, subjects read that the parties had stipulated that damages in the event of breach would be set at \$1100 (though the scenario made it clear that the promisee's loss would be only \$1000). In the Control condition, parties read that the law of contracts would require damages in the amount of \$1000. Subjects were randomly assigned to read either both Control cases or both Penalty cases first, followed by the other condition. On the final page, subjects reread one of the scenarios in both conditions and answered a series of questions about the difference between the cases.

2. *Results*

For the first analysis, I looked only at the first two cases that each subjects saw. I compared subjects who saw the Penalty condition to subjects who saw the Control condition. In the between-subjects analysis, subjects showed a strong preference for breaching a contract with a stipulated small penalty over a contract whose damages were slightly smaller and determined by the law of contracts. Data is shown in a chart below, in which I show the difference between the lowest efficient offer and subjects' actual WTA. Note that the lowest efficient offer differs across conditions in this experiment, because the penalty condition requires an additional \$100 in compensation to the promisee.

FIGURE 2.
PREMIUM REQUIRED TO BREACH CONTRACT
WITH AND WITHOUT PENALTY CLAUSE



In this study, subjects had a fairly marked preference for breaching a contract with a penalty clause than one with no penalty. If we compare the “breach premium”—the amount subjects needed on top of their original profit and the money they would pay to the promisee—that premium was almost doubled from the Penalty condition to the Control condition. In this case, there was a real monetary difference between the damages awards in the two contracts—it was \$100 more expensive to breach the contract with the penalty clause. Nonetheless, the effect was firmly in the opposite direction, with subjects needing more money to breach the Control contract, a contract that was apparently less expensive to breach.¹⁰²

Interestingly, this effect does not appear in within-subjects analyses. In fact, the effect is significant in the opposite direction.¹⁰³ After completing the first two items, subjects saw the items in the alternate condition. When subjects responded to the first pair of scenarios, those who saw the Penalty condition gave a much lower WTA than those who saw the Control condition. However, when subjects went on to respond to the second pair of scenarios, they indicated that they would need more money to be willing to breach the Penalty contract—a trend in line with the economic prediction of rational response to incentives.

Finally, in this study, I asked subjects to answer some questions about the differences between the contracts. Subjects reported that breaching the

102. The difference was significant within each scenario and aggregated across scenarios. In the IT seminar scenario, subjects indicated that they would not breach for less than \$3,926.32 in the Control condition, but the Penalty group required only \$3,081.36, a difference of \$844.96 ($t=1.988$, $df=115.34$, $p=.0492$). In the Party Rental scenario, subjects in the Control group reported that they would not breach for less than \$3,726.42, and subjects in the Penalty group reported that they would not breach for less than \$2,965.96, a difference of \$760.46 ($t=2.337$, $df=173.80$, $p=.0206$).

103. IT scenario: mean difference=\$698.99 ($t=4.256$, $df=98$, $p<.0001$); Party Rental scenario: mean difference=\$954.46 ($t=2.210$, $df=100$, $p=.0294$).

Control contract was marginally more immoral and more likely to upset the promisee.¹⁰⁴

C. Experiment 3: Transparent Design with Follow-Up Questions

The goal of Experiment 3 was to ask subjects to think more deliberately about the effect of liquidated damages on the moral context of breach of contract. To that end, the study design was much like the first two experiments, except that each scenario was followed by a series of questions designed to specifically test the hypothesis that breaching a contract with a liquidated-damages clause is less objectionable because it changes the normative expectations of the promisee. In this study, I chose to include questions along with each scenario rather than at the end of the study, because it permitted subjects to consider the differences between the contracts before they had committed to their WTA responses. The intention was to ask them to think about the role of liquidated damages at a time when they were not also trying to be consistent with earlier WTA responses, which may have affected responses to probe questions in Experiments 1 and 2. I also modified the questions and the response parameters to make the measure more sensitive.

To that end, each case was followed by a WTA question and then 8 additional questions about the moral implications of breach. The 9 total questions were all on a single page, and subjects could answer them in any order they wished. For each question (apart from the percentage questions), subjects were asked to give their answer as a number from 1 to 100, where 1 is “not at all” and 100 is “extremely.” Subjects answered the following questions:

1. To what extent do you think it is wrong to break this contract?
2. To what extent do you think it is immoral to break this contract?
3. When the client was signing the original contract in this case, what do you think they estimated as the likelihood that you would break your deal?
4. What percentage of people do you think would breach the contract in this case?
5. How upset do you think the client would be if you breached the contract in this case?
6. How guilty would you feel for breaking this contract?
7. To what extent do you think the amount that the original client will receive is fair compensation?
8. To what extent do you think that breaching this contract would affect your reputation?

104. Immoral: $t=1.873$, $df=236$, $p=.0624$. Upset: $t=3.5151$, $df=236$, $p=.0005$.

1. Method

One-hundred thirty-one subjects responded to a web-based questionnaire about breach of contract. One-hundred subjects were female, thirty-one were male. Subjects' ages ranged from twenty-four to seventy-five, with a median age of forty-five. In this study, subjects saw four screens. Each screen showed one of two possible contracts (party rental or IT seminar), in either the LD condition or the Control condition. Subjects were randomly assigned to see either both liquidated-damages cases first, followed by both control cases, or the reverse.

2. Results

Subjects distinguished between the liquidated-damages contracts and the Control contracts. In a within-subjects analysis, 26.5 percent of subjects showed a lower WTA amount for the LD contracts than they reported in their own respective responses to the Control items.¹⁰⁵ What this means is that, given the choice between a contract with a liquidated-damages clause and a contract with no liquidated-damages clause, a significant proportion of subjects explicitly preferred to breach the contract with the liquidated damages, while very few subjects preferred the converse (again, here, I am using WTA levels to infer preference).¹⁰⁶ Results from the follow-up questions support this inference. Subjects thought that breaching a contract with a liquidated-damages clause was less "wrong" and less immoral.¹⁰⁷

The data from the subsequent questions helps to shed some light on why subjects found breach less objectionable in the context of a contract with liquidated damages. Subjects did not think that the compensation itself was any more fair in the liquidated-damages cases, even though they thought that breaching a contract with a liquidated-damages clause was less immoral. They did not appear to believe that a promisee in the control condition was deserving of more money, but they still thought that the moral harm of breach was less problematic in the liquidated-damages case.

Subjects believed that a client who saw the contract with the liquidated-damages clause would estimate the probability of breach to be slightly but significantly higher.¹⁰⁸ Subjects seemed to have the intuition that part of the

105. Using a within-subjects analysis, the overall difference between subjects' responses to the LD contracts and the Control contracts was significant, with lower WTA amounts in the LD conditions ($t=2.360$, $df=131$, $p=.0198$).

106. Note that when using a within-subjects, transparent design in an experiment like this, the expectation is that many subjects will respond identically to the items, preferring to be consistent.

107. The difference was significant for both items. Altogether, 43.2 percent of subjects thought that it was more wrong to breach the Control contract. Of subjects who thought it was more wrong, the mean difference on a 100-point scale of wrongness was 33.26 (overall mean difference=8.17, $t=2.612$, $df=131$, $p=.010$). And 40.9 percent of subjects thought it was more immoral to breach the Control contract, and of those subjects the mean reported difference on a 100-point scale was 26.7 (overall mean difference=5.95, $t=2.248$, $df=131$, $p=.026$).

108. In all, 41.7 percent of subjects reported that the promisee would be more likely to expect breach in the LD condition. Of those subjects, the average percentage difference in promisee's

harm of the breach is that it comes as an unwelcome shock to the promisee, who had not anticipated that breach was a possibility. In fact, one subject responded to a Control scenario with the observation that, “When someone signs a contract, they expect the service provided. They never anticipate the schmuck that [sic] calls and says, ‘I got a better deal.’” When the liquidated-damages clause was included, though, it served as notice to the promisee that breach was a possibility. One subject articulated this in a comment: “I would feel less guilty about not doing the original job as the clause forewarns the original client that a breach is possible.”

Following from the notion that promisees would be better prepared for breach in liquidated damages cases, subjects also reported their intuition that the negative reputation effect would be significantly less potent in the liquidated-damages case.¹⁰⁹ There were no significant differences between conditions in how upset subjects thought clients would be in the event of breach, how guilty breachers would feel, or the estimate of the percent of the population who would be willing to breach the contract, though the overall trends were in the predicted directions, respectively. There were no significant between-subjects differences, comparing the first two scenarios between the group that saw the control scenarios first to the group that saw the LD scenarios first. Similarly, there were no effects of order; that is, subjects’ responses were not significantly different as a function of which item or condition they saw first. Finally, there were no statistically significant differences between men’s and women’s responses.¹¹⁰

IV. DISCUSSION

The most important result from this study is that subjects required less money to breach contracts with liquidated damages—even slightly punitive liquidated damages—than otherwise identical contracts. This was true even though subjects knew in either case what the damages would be. Lower willingness-to-accept responses in the liquidated-damages cases mean that there are opportunities for efficient breach that people will exploit when a contract has a liquidated-damages clause and reject when the contract does not have such a clause. Subjects thought that breach in the event of stipulated damages was less immoral, less “wrong,” and less damning to one’s reputation. Subjects also believed that a promisee would estimate a higher probability of breach when a contract had a liquidated-damages clause than when it did not. Subjects’ decisions appeared to take into account their sense that promisees would be more likely to expect the breach when they had signed off on a clause specifying their rights and obligations in the event of

subjective probability of promisor’s breach was 28.5% (overall mean difference=5.45, $t=2.077$, $df=131$, $p=.0398$).

109. Altogether, 45.5 percent of subjects thought that reputation effects would be worse in the Control condition. Of those subjects, the mean difference on a 100-point scale of reputation harm was 30.1 (overall mean difference=8.326, $t=3.142$, $df=131$, $p=.002$).

110. Although I did not discern any trends based on subject sex, it is possible that differences exist but are undetected because of the low number of male subjects.

nonperformance. It is also worth pointing out some of the broader baseline data that emerged from each of these three studies: namely, that subjects demanded very high premiums to breach overall. In none of the studies did the mean, or even median, subject response approach the efficient level, whether or not the contract included a liquidated-damages clause. In light of this data, it seems reasonable to conclude that subjects' moral qualms deter efficient breach, but that the presence of a liquidated-damages clause in a contract reduces those qualms and, in turn, encourages breach.

In Part II, I reviewed evidence that small penalties reduce cooperation in certain kinds of interactions. The dominant explanation of those results is that the penalty structure "crowds out" social norms of reciprocity or courtesy or, in this case, promising. These studies may help refine that theory. When a cooperative venture of some kind involves a built-in penalty and compensation system for defection, the action is no longer properly thought of as defection. For example, it is not clear that parents are being discourteous when they are paying overtime wages to have staff wait for them. Similarly, it is not clear that breaching a contract with a liquidated-damages clause comes firmly within the category of breaking a promise. The parties agreed to a certain contingency, and when the contingency arose, acted in accordance. This is quite different than breaching and forcing the promisee to sue for damages, which involves going outside the agreement and invoking an authority (a judge) to which neither party originally intended to submit. Liquidated-damages clauses may offer parties the opportunity to take advantage of profitable breach opportunities without violating the moral code.

A. *Debiasing*

Debiasing constitutes one framework for thinking about the psychological effects of a liquidated-damages contract. Christine Jolls and Cass Sunstein have argued that one possible function of the law is to encourage people to be more rational.¹¹¹ This approach attempts to distinguish between paternalistic laws that respond to irrationality by mandating the government's preferred solution and laws that operate directly on the decision-making process, facilitating deliberative decisionmaking without requiring a specific result.

The idea of debiasing is not new to psychology. Behavioral researchers who study cognitive biases have, in some cases, found ways to minimize or eliminate the effects of a bias with a variety of mechanisms intended to encourage deliberation. For example, one robust behavioral phenomenon is the endowment effect. Researchers have shown in a variety of settings that people place a higher value on a good that they own than on one that they do not own, even if the good is, say, a pen that the experimenter just handed to

111. Christine Jolls & Cass R. Sunstein, *Debiasing through Law*, 35 J. LEGAL STUD. 199 (2006).

them.¹¹² This effect can be greatly diminished, however, by giving subjects two pens, or even by asking them to engage in repeated rounds of pen trading.¹¹³ Sunstein and Jolls also cite the example of self-serving biases.¹¹⁴ In negotiation experiments, researchers have found that subjects tend to think that their own position is more reasonable, and that outcomes in their own favor are also objectively fair.¹¹⁵ However, this effect is diminished when parties are asked just to list factors that weigh against their position or arguments that an opponent might make.¹¹⁶

Subjects in the experiments reported above seem to think that nonperformance of a promise is de facto morally wrong. In typical usage, a promise is a promise to perform, not a promise to do something as valuable as performance. If my sister promises to come to my birthday party, it is not morally permissible for her to skip it so she can get her nails done and send me a check to cover the lost value of her companionship. The nature of our relationship is one reason that it is not permissible.¹¹⁷ Most noncontractual promises happen between people in a nonmarket-based relationship. It would be weird and inappropriate to value my sister's company in terms of money. It would even be weird for me to charge her for more obviously market-like services. If she promised to take care of my child for a day and then broke her promise at the last minute, it would nonetheless be odd for her to pay for my babysitter.

I take this application of the moral rule to be based on heuristic reasoning rather than moral reasoning per se. Implicit in an argument against contract breaching because it is promise breaking is the idea that the promisee is going to be disappointed. And, in noncontractual promising, this is probably right. Most broken promises are not compensated. Breaking a promise usually leads to a real harm or loss of some kind. But this is not the

112. For a good overview, see Daniel Kahneman et al., *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSP. 193 (1991).

113. Katherine Burson et al., *Providing Multiple Units of a Good Attenuates the Endowment Effect* at 13 (Apr. 30, 2009), available at http://pages.stern.nyu.edu/~lcaldwel/paper_Burson.doc (showing that the robust endowment effect that exists when players are asked to trade a single good disappears when they are given multiples of that good); see also Charles R. Plott & Kathryn Zeiler, *The Willingness to Pay-Willingness to Accept Gap, the "Endowment Effect," Subject Misperceptions, and Experimental Procedures for Eliciting Valuations*, 95 AM. ECON. REV. 530, 543 (2005) (showing data to suggest that when subjects are permitted to play in multiple paid rounds of trade, they are less likely to show an endowment effect).

114. Jolls & Sunstein, *supra* note 111, at 201.

115. See Linda Babcock & George Loewenstein, *Explaining Bargaining Impasse: The Role of Self-Serving Biases*, 11 J. ECON. PERSP. 109, 110 (1997) (describing the role of self-serving biases in individuals' assessments of tort claims).

116. Linda Babcock et al., *Creating Convergence: Debiasing Biased Litigants*, 22 L. & SOC. INQUIRY 913, 920 (1997).

117. See Alan Page Fiske & Philip E. Tetlock, *Taboo Trade-offs: Reactions to Transactions That Transgress the Spheres of Justice*, 18 POL. PSYCHOL. 255, 256 (1997) ("People reject certain comparisons because they feel that seriously considering the relevant trade-offs would undercut their self-images and social identities as moral beings. . . . Two values are constitutively incommensurable whenever people believe that entering one value into a trade-off calculus with the other subverts or undermines that value.").

case in breach of contract as long as the breacher pays expectation damages. Barring court and transactions costs (which are arguably absent from the scenarios in the studies presented above), there is no actual loss to the promisee when the promisee expected a performance worth \$1000 and receives \$1000 in cash instead. Thus, I argue here that subjects use a heuristic rule of promise keeping, and that this rule results in a bias against breach of contract.

To the extent that subjects have an antibreach bias, liquidated damages may be an effective means of debiasing them. In Part I of this Article, I considered some ways that negotiating damages *ex ante* could influence parties' decisionmaking about a contract. Drafting a liquidated-damages clause asks parties to make calculations they might be inclined to ignore and to assign values to goods and to think about their preferences. The experiments reported here also suggest that the mere presence of a liquidated-damages clause, even one that essentially mimics the rule of expectation damages, encourages parties to conceptualize the contractual agreement in terms of a commercial transaction rather than a moral duty.

The debiasing effect of a liquidated-damages clause may not be about the moral rule alone. Choosing not to breach a contract is, I presume, an overdetermined phenomenon, and liquidated damages may also affect how subjects think about other aspects of breach. Breach of contract will often result in negative reputation effects.¹¹⁸ Another deterrent to efficient breach could be mistaken understanding of the law. It would not be surprising to find that people believe that the legal rule follows the moral rule, and that they are bound to perform as promised.¹¹⁹ Transactions and litigation costs may also be a factor; most people find the idea of entanglement with the court system highly unpleasant.¹²⁰ The experiments in this Article attempt to control for factors like these, but these factors nevertheless contribute to the strength of the promise-keeping moral heuristic. In many real-life cases, people have a lot of good reasons not to breach contracts. The pragmatic justifications for the general rule may have residual effects on subjects' inclinations and prejudices about breach. When subjects see a liquidated-damages clause they know that both parties are aware of the rule, they can assume that they will not have to go to court, and they estimate a lower chance of negative reputation effect.

118. See, e.g., Bernstein, *supra* note 33, at 1786 (describing an industry in which violation of social norms is punished with loss of reputation, which leads in turn to lost profits).

119. See, e.g., Paul H. Robinson & John M. Darley, *Does Criminal Law Deter? A Behavioral Science Investigation*, 24 OXFORD J. LEGAL STUD. 173, 176 (2004) (finding behavioral evidence that people's predictions of the legal rule "matched their own judgments of what the law should be, suggesting that they were using their own moral intuitions to predict the legal rule, rather than any real knowledge of the legal code's rules" (emphasis omitted)); see also Stolle & Slain, *supra* note 32, at 91 (finding evidence that parties believe that they are bound to the terms of a contract that they have signed, even if the contract contains unenforceable exculpatory clauses).

120. See, e.g., David Starr, *The No-Fault Alternative to Medical Malpractice Litigation: Compensation, Deterrence, and Viability Aspects of a Patient Compensation Scheme*, 20 TEX. TECH. L. REV. 803, 806 (1989) (citing evidence of the psychological costs of litigation).

B. Reconciling Conflicting Incentives

Just as a liquidated-damages clause may be able to help individuals reconcile conflicting moral and financial incentives, it may also offer a tool to bring the moral and economic theories of contract closer together. The traditional moral view of contract holds the idea of a promise, and the importance of keeping promises, as central to any analysis of breach of contract.¹²¹ The economic view, on the other hand, considers the promise an obligation to deliver a certain amount of value to the promisee, whether via performance or in money damages.¹²² I have used evidence collected experimentally to suggest that these tensions have real effects for most people; moral qualms about breaking promises have a deterrent effect on efficient breach. I found evidence that a liquidated-damages clause could encourage breach of contract as long as it is otherwise efficient. The economic or utilitarian argument in favor of breach for the kinds of contracts I have described in these experiments is that they are Pareto optimal and wealth maximizing.¹²³ That is, if the promisor keeps the contract, the promisee gets *X*, the promisor gets *Y*, and the third-party offeror (the person who made the more lucrative offer to the promisor) does not get to make a contract. If the promisor breaches the contract, the promisee gets *X*, the promisor gets more than *Y*, and the third-party offeror gets more than nothing. The latter situation is preferable inasmuch as some people gain and no one loses.

I have argued that subjects use a kind of promise-keeping heuristic that causes a bias against breach even in these arguably unambiguous cases of efficient breach. I would like to briefly consider the argument that the core of this intuition is more than the simple cognitive error that characterizes most moral heuristics.¹²⁴ Even assuming that the promisee experiences no financial loss or hassle, subjects have the intuition that he will be disappointed by nonperformance. This disappointment might be based on some kind of idiosyncratic preference for performance over money, or it could be disappointment in the relationship, that there was some kind of failed mutual understanding. I think that this is a valid objection to efficient breach, and one that other scholars have described more fully. Seana Shiffrin, for example, argues that when the law of contract does not reflect moral intuitions, there are broader social consequences. “The use of a moral concept as

121. See FRIED, *supra* note 16, at 17 (“There exists a convention that defines the practice of promising and its entailments. . . . By virtue of the basic Kantian principles of trust and respect, it is wrong to invoke that convention in order to make a promise, and then to break it.”).

122. For the original articulation of this position, see OLIVER WENDELL HOLMES, JR., *THE COMMON LAW* 301 (1909) (“The only universal consequence of a legally binding promise is, that the law makes the promisor pay damages if the promised event does not come to pass. In every case it leaves him free from interference until the time for fulfilment has gone by, and therefore free to break his contract if he chooses.”).

123. See Shavell, *supra* note 15, at 467 (describing the argument for Pareto-optimal transactions).

124. See Sunstein, *supra* note 41, at 533 (“There is growing evidence that people often make automatic, largely unreflective moral judgments, for which they are sometimes unable to give good reasons.”).

shorthand is one way to make legal outcomes more accessible and to facilitate transparency,” she argues. “[I]f we invoke promises, directly or indirectly, we have a duty, taking something of the form of a side constraint, not to act or reason in ways that are in tension with the maintenance of a moral culture of promising.”¹²⁵ One argument against efficient breach is that it is not in accordance with the “moral culture of promising,” or that it is disruptive to the social fabric. The argument from human solidarity, very broadly speaking, is that the breach is a harm in itself, because it requires the parties to repudiate a mutual recognition and understanding.¹²⁶ One might further argue, as Shiffrin does, that when the legal system fails to recognize this harm, there is an erosion of the power of the moral norm overall.¹²⁷

Liquidated damages may offer a way to reconcile the efficiency concerns on the one hand with otherwise defensible, important moral norms on the other hand. People think a promise is a promise to perform. When parties introduce liquidated damages into a contract, they transform a promise to perform into a promise to perform *or* pay. Breaching the contract becomes something internal to the agreement between the parties, rather than a nullification of the agreement. A promisee may still be subjectively disappointed, but she will not be blindsided. A promisee compensated for breach under the terms of the liquidated-damages clause has less reason to be angry and no occasion to question the moral underpinnings of the legal system.¹²⁸

C. Implications for Contract Law

The arguments in this Article are not intended to make the broad claim that the legal regime should fall lockstep in line with moral intuition, nor do they make a case for liquidated damages to trump all other policy priorities and implications. However, this Article does attempt to shed light on some of the underappreciated benefits of stipulating damages. The finding that liquidating damages encourage efficient breach has implications for how we think about shaping the legal rules of contract. Although this Article is not primarily policy oriented, I will consider three areas in which these results might affect the drafting, interpretation, or enforcement of liquidated-damages clauses.

One argument that flows from this line of research is that more companies and private parties should stipulate damages—requiring, in turn, that

125. Shiffrin, *supra* note 27, at 749.

126. See Markovits, *supra* note 25.

127. See Shiffrin, *supra* note 27, at 749.

128. See Paul H. Robinson & John M. Darley, *Intuitions of Justice: Implications for Criminal Law and Justice Policy*, 81 S. CAL. L. REV. 1, 23 (2007) (arguing that when the law is not in accordance with moral intuition, the legal system suffers a lack of moral credibility, which in turn has negative effects on citizens' behavior).

courts take a more liberal view of liquidated damages.¹²⁹ One straightforward way to liberalize the rule of liquidated damages is to eliminate the requirement that damages be difficult to prove.¹³⁰ The Second Restatement approach requires both that damages be reasonable as well as difficult to ascertain or predict at the time of contracting.¹³¹ There are good policy reasons to think that a (lenient) requirement of reasonableness is useful. When parties have divergent levels of bargaining power, information, or sophistication, it is easy to imagine that without a requirement that damages fall more or less in line with the background rule of expectation damages, there would be opportunity for exploitation.¹³² However, the difficulty-of-proof requirement appears to reflect a resistance to liquidated damages that is not easily explained by the arguments in favor of a reasonableness requirement. Under this rule, even arguably reasonable damages are suspect when there is no reason, *ex ante*, to think that damages would be difficult to determine. The requirement that the loss be *ex ante* uncertain ignores the benefits of clarifying the parties' expectations, including the benefit of producing more efficient breaches.

The results reported in this Article also bear on which kinds of contracts we would expect to benefit from the inclusion of a liquidated-damages clause. So these results do not seem especially useful in the realm of consumer contracts. In consumer contracts, the liquidated-damages provision is not negotiated and is rarely read by the consumer.¹³³ The social norms of breaching adhesive contracts are almost certainly less salient and less focused on promise keeping than in situations of negotiated exchanges between parties. There is no reason to think in such a situation that a liquidated-damages clause will encourage efficient breach by the consumer (who has not read the contract) or by the company (which is a savvy market actor less reliant on social norms in the legal context).

However, there are other areas in which we might want to push for greater use of liquidated-damages clauses. For example, encouraging efficient breach might be a particularly useful goal in the real-estate context.

129. See Goetz & Scott, *supra* note 4, at 554–56 (describing the history of strict judicial scrutiny of liquidated damages and arguing that the original justification for the doctrine no longer applies, in turn suggesting that courts should apply more flexible standards).

130. The requirement that damages be difficult to prove is a long-standing element of the law of liquidated damages. See, e.g., *Williams v. Dakin*, 22 Wend. 201, 213 (N.Y. 1839) (citing the impossibility of estimating lost profits as a justification for enforcing a liquidated-damages clause).

131. See RESTATEMENT (SECOND) OF CONTRACTS § 356 (1981) (“Damages for breach by either party may be liquidated in the agreement but only at an amount that is reasonable in the light of the anticipated or actual loss caused by the breach and the difficulties of proof of loss.”).

132. The problem of exploitation was, in fact, part of the original justification for the strict scrutiny of liquidated damages. See, e.g., Loyd, *supra* note 48, at 129–30 (describing the argument that “bargaining is not always on equal terms, that the necessities of one party or the superior cunning of the other will frequently upset the balance of risk germane to an executory contract”).

133. See Robert A. Hillman & Jeffrey J. Rachlinski, *Standard-Form Contracting in the Electronic Age*, 77 N.Y.U. L. REV. 429, 446–47 (2002) (iterating a variety of reasons that people do not read form contracts, including rational time saving, trust in businesses not to risk their reputations with exploitative terms, and difficulty comprehending legal language).

The studies in this Article are intended to describe the behavior of relatively unsophisticated actors in one-shot interactions. This describes many contracts for the sale of a home.¹³⁴ People who otherwise are not engaged in complex transactions are still likely to buy or sell a home at some point in their lives. Furthermore, home sales involve nontrivial sums of money, such that efficient breaches of contract could have real economic benefits for some people. In Pennsylvania, the form contract for real-estate transactions includes a liquidated-damages provision,¹³⁵ and this minor feature of a common contract may have important effects on parties' behavior. One avenue for future empirical study in this area would be a collection of data from the field, comparing the rates of breach in these kinds of contracts with rates of breach when damages are not specified in the contract. The experimental results presented in this Article offer new considerations and research directions for the legal rules of liquidated damages.

CONCLUSION

In this Article, I have challenged an assumption about how remedies for breach of contract affect parties' behavior. I have used experimental methods to show that parties respond not just to the level of damages but also to the source of the damages award. I found that when parties understand the possibility of breach and its consequences to be a part of the contractual agreement, they are more willing to breach, and less likely to find the breach morally offensive. Stipulating damages permits parties to pursue a legal, wealth-maximizing course of action while remaining within the framework of normative moral behavior.

134. See, e.g., William N. Eskridge, Jr., *One Hundred Years of Ineptitude: The Need for Mortgage Rules Consonant with the Economic and Psychological Dynamics of the Home Sale and Loan Transaction*, 70 VA. L. REV. 1083, 1162 (1984) (describing the buyer, seller, and even realtor in a home-buying transaction as unsophisticated and unrealistically optimistic).

135. See, e.g., "Contract for the Sale and Purchase of Real Estate (No Broker)," available at http://www.csb.uncw.edu/people/eversp/classes/BLA361/BusLawForms/Basic_percent20Contracts/SaleofResidLotNC.pdf (including a fill-in-the-blank item for buyer and seller to stipulate "earnest money" as well as a clause that permits the seller to retain earnest money as liquidated damages in the event of buyer default).

