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# The Influence of Law and Economics Scholarship on Contract Law: Impressions Twenty-Five Years Later

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# THE INFLUENCE OF LAW AND ECONOMICS SCHOLARSHIP ON CONTRACT LAW: IMPRESSIONS TWENTY-FIVE YEARS LATER

JEFFREY L. HARRISON\*

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## INTRODUCTION

Twenty-five years ago I was honored to be invited to participate in a contract law conference sponsored by New York University in conjunction with the publication of the *N.Y.U. Annual Survey of American Law*.<sup>1</sup> My specific assignment was to assess the impact of law and economics scholarship on contract law. I responded by conducting an empirical study of judicial citations to selected law and economics works in order to ascertain the extent to which judges seemed to be relying on the teachings of law and economics. In

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1. See Jeffrey L. Harrison, *Trends and Traces: A Preliminary Evaluation of Economic Analysis in Contract Law*, 1988 N.Y.U. ANN. SURV. AM. LAW 73 (1988).

effect, the effort was part of a general question that concerns all law professors: Does scholarship matter?

With the permission of the editors of the *N.Y.U. Annual Survey of American Law*, I have repeated the study with respect to the scholarship sample selected twenty-five years ago. In addition, I have supplemented and expanded the sample of scholarship to include works appearing since the initial effort. The results of that project are the focus of this article. This examination suggests that law and economics scholarship has had two uses. First, it has provided a new rationale for many traditional contract rules. As one would expect, this means it is most likely to be invoked when there are pressures to change the law. Second, although the quantity of citations remains modest, it is clear that law and economics scholarship, at least in the context of contract law, has affected the vocabulary and reasoning of courts.

Before discussing those results, I address a number of preliminary matters. First, it is useful to understand the methodology, its limitations both now and twenty-five years ago, and the results of that earlier study. Section II is devoted to these matters. Second, it is important to understand the different scholarly landscapes of the late 1980s and the present. In fact, since my initial offering, two important areas of study—behavioral economics<sup>2</sup> and happiness<sup>3</sup>—have come to influence the economic approach to law and possibly also contract law. The discussion is found in Section III. Finally, in Section IV, the empirical results are presented and discussed. Both quantitative and qualitative assessments are made.

## I.

### SEARCHING FOR THE IMPACT OF LAW AND ECONOMICS: THE INITIAL STUDY

In the 1988 version of this effort,<sup>4</sup> I selected fifty-eight books and articles that could fairly be described as involving economics and contract law.<sup>5</sup> The selection was not random. My sample was composed of articles that were well placed as far as the prestige of the journal and were ones I was generally familiar with as having important implications for the field. As examples, several articles

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2. See *infra* pp. 9–13.

3. See *infra* pp. 13–16.

4. The actual research of the original study was undertaken in 1987.

5. It would not be accurate to say that all of those selected “applied” economics to law because some were critical of the economic approach. See, e.g., Peter Linzer, *On the Amoralty of Contract Remedies—Efficiency, Equity, and the Second Restatement*, 81 COLUM. L. REV. 111 (1981).

coauthored by Charles Goetz and Robert Scott were included, as well as a series of articles by Richard Epstein.<sup>6</sup> Two books were included.<sup>7</sup> One was Richard Posner's *An Economic Analysis of Law*,<sup>8</sup> and the other was A. Mitchell Polinsky's *An Introduction to Law and Economics*.<sup>9</sup> If anything, one could argue that the selection of the articles and books was biased toward overstating the influence of law and economics since it was disproportionately composed of works by some of the leading authorities of the era.

Using the Westlaw database "allcases" I determined the frequency of citation for each work in the sample. Half of the works of the fifty-eight selected were not cited in any case found in the "allcases" database. In fact, there were only seventy-six citations to the selected works in total. Only sixty-four separate cases had cited the works, owing to the fact that some cases cited more than one work from the sample.

In each instance of a citation, the work was classified as either having no apparent impact on the decision, having its economic logic recognized although not apparently influencing the outcome, or having actually influenced the outcome. A citation was placed in the first category if the work was cited in a string-cite or for a proposition unrelated to law and economics. This does not mean the work did not support the opinion. To be in the second category, a citation had to involve an express recognition of the economic analysis of the issue. If the court seemed to adopt the economic analysis of the work as persuasive, it was included in the final category.<sup>10</sup> In nineteen of the sixty-four cases, I felt it was fair to say that econom-

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6. These are all identified in Appendix A.

7. The analysis was confined to citations to the parts of the books that were devoted to contract law.

8. At the time of the original survey, Judge Posner's book was in its second edition. Currently it is in its seventh. Citations found here are to the seventh edition, which was published in 2007.

9. The Polinsky book was in its first edition at the time of the original study. It is now in its fourth edition.

10. As an example, consider the following from *DAR & Associates, Inc. v. Uniforce Services, Inc.*, 37 F. Supp. 2d 192, 201 (E.D.N.Y. 1999):

Contracting parties have an incentive to negotiate a liquidated damages clause whenever the costs of such a negotiation are less than the expected costs resulting from their reliance on the standard compensatory damages rule for breach of contract. See Charles J. Goetz & Robert E. Scott, *Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach*, 77 Col.L.Rev. 554, 559 (1977). This incentive was present here with respect to a prospective breach by DAR of the noncompete and nonsolicitation clauses.

The court then went on to apply the analysis to the facts in the case.

ics scholarship had influenced the outcome.<sup>11</sup> At the time, I expressed surprise that the works had been cited so infrequently.<sup>12</sup> The results of that previous study are found in Appendix A to this work.

The current effort returns to the fifty-eight works in the original sample. In Appendix A, citations to those works in cases decided since 1987 are marked with an asterisk. In addition, I added twenty-two newer works to the sample. The selection process for the additional twenty-two was similar to that for the original fifty-eight. I selected well-placed articles that seemed to me to have important implications for contract law. These are found in Appendix B. Citation checks and classifications were applied to this second group. For reasons that will be discussed later, a separate examination was made of the citations of articles concentrating on behavioral economics. In Section III, I discuss the results and implications of that second study.

At this point, however, it is important to ask whether anything of importance can be gleaned from this methodology. Clearly a great deal of caution is in order, but I believe the answer is yes. I advise caution because there are a multitude of ways in which economic reasoning, and even specific law and economics works, may influence judges without resulting in a citation. For example, judges, clerks, and attorneys may have been exposed to the economic approach and this may be reflected in the logic expressed in an opinion. Thus a lack of citation does not mean a specific work was not influential.

In addition, if a court has already adopted a position that is consistent with a law and economics approach, but it did not rely on economics when the position was initially adopted, the court may have little incentive to turn to economics for support. For example, it is fair to say that a law and economics approach is one that favors more frequent enforcement of liquidated damages clauses.<sup>13</sup> But if a court already has adopted that approach, it is less inclined to feel the need to bolster its position by noting the economic logic

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11. This number may be misleading. Although there were nineteen instances of "influence," the cases only cited a total of nine works. See Harrison, *supra* note 1, at 80.

12. This reflected my own belief that law professors wrote to influence law and would therefore be relied upon by judges. Now, of course, I recognize the lack of logic in this deduction.

13. See RICHARD A. POSNER, *THE ECONOMIC ANALYSIS OF LAW* 127-130 (7th ed. 2007).

offered by scholars in the field.<sup>14</sup> In fact, one would expect greater appeal to outside authority to occur when a court is inclined to modify the law or prefers to resist an existing trend.

Perhaps the best example of this phenomenon is reliance on the notion of the efficient breach.<sup>15</sup> The theory of the efficient breach provides an economic justification for awarding expectancy damages but no more. As of late 2011, using the database “allcases,” the term “efficient breach” was found 131 times. Several of the earliest “hits” were in the context of decisions involving liquidated damages. The courts cited a well-known article on that subject by Charles Goetz and Robert Scott, the title of which included “efficient breach.”<sup>16</sup> The first example of the use of the term in a judicial opinion that seemed to suggest approval of the economic theory was not until 1984.<sup>17</sup> Yet the expectancy measure of damages was established well over a century before that time.<sup>18</sup> In short, well-settled law is not likely to require a great deal of defense or explanation by way of academic authority.

Conversely, as a general matter one would expect more cites to scholarship when an area of law is in flux. A lower court adopting a novel or even slightly varied version of an existing rule may well feel that citations and discussion will lower the risk of reversal. Similarly, a court resisting a trend in the law may feel inclined to demonstrate scholarly support for its position. For example, one item in the original sample was Richard Epstein’s 1984 article, “In Defense of the

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14. For additional discussion on enforcement of liquidated damages clauses, see Kenneth W. Clarkson, Roger LeRoy Miller & Timothy J. Muris, *Liquidated Damages v. Penalties: Sense or Nonsense?*, 1978 Wis. L. Rev. 351; Charles J. Goetz & Robert E. Scott, *Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach*, 77 COLUM. L. REV. 554 (1977).

15. The logic of the efficient breach goes like this: Suppose *A* contracts to sell a car to *B* for \$2000. The car is to be delivered in one week. When performance is due, the market value of the car is \$2500. At the same time, *C* offers *A* \$3000 for the car. Under the efficient breach theory, *A* should breach the contract with *B*, pay \$500 in damages to *B*, and sell the car to *C*. This outcome means *A*’s position is improved, *B* is not worse off, and *C* is also better off by virtue of receiving a car which *C* values in excess of \$3000. See ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 189–90 (3rd ed. 2000). Of course, for the breach to be efficient in the sense of increasing or leaving constant the utility of all participants, the monetary compensation received by *B* must offset the loss in utility associated with the breach. There is no reason to assume this is the case.

16. Goetz & Scott, *supra* note 14.

17. *Rich & Whillock, Inc. v. Ashton Dev., Inc.*, 157 Cal. App. 3d 1154, 1159 (Cal. Ct. App. 1984).

18. See A.W.B. SIMPSON, *LEGAL THEORY AND LEGAL HISTORY* 217–19 (2003).

Contract at Will.”<sup>19</sup> The article was written when there appeared to be a trend toward changing the default position that employment contracts were terminable at will.<sup>20</sup> Since the first iteration of this study it has become the most cited *article*<sup>21</sup> in both the original and expanded sample and is always cited to support the terminable-at-will standard.<sup>22</sup>

Another limitation is that much of what is identified as economics is simply logic that one can apply without adopting a formal economic perspective or referring to economic sources at all.<sup>23</sup> For example, a great deal of contract law is about risk allocation. Thus it responds to questions like: Is there liability for consequential damages? Is the defendant liable even though an unexpected event occurred that made performance more onerous? These issues were dealt with well before law and economics scholars began writing about them. And, for the most part, courts understood the concept of allocating the risk to the party best able to bear it or insure against it. The point is that courts seemingly unaffected by modern economic arguments may tend to find other ways to achieve the same outcome. In a sense these factors explain the focus of this article. It is intended to be more about the influence of law and economics scholarship on contract law than an assessment of the general presence of economic reasoning by those deciding contract law matters.

One final factor that falls into this general category of disclaimers is a function of the twenty-five years between the initial study and this follow up. Writing about opinions in 1987 meant studying the works of judges who most likely were only moderately, if at all, acquainted with the “law and economics” movement. It seems equally likely that the attorneys attempting to persuade those judges were only slightly more familiar with overtly economics-based arguments. Thus if economics played a role, there was a much greater likelihood it would be based on the scholarship of the

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19. Richard A. Epstein, *In Defense of the Contract at Will*, 51 U. CHI. L. REV. 947 (1984).

20. See generally Jeffrey L. Harrison, *The “New” Terminable-at-Will Employment Contract: An Interest and Cost Incidence Analysis*, 69 IOWA L. REV. 327 (1984) (noting that employees formerly terminable at will were being afforded some job security).

21. Judge Posner’s *The Economic Analysis of Law* remains the most frequently cited work.

22. Citations are found in Appendix A.

23. Richard Posner makes the case that much of the common law was efficient well before the advent of the theory of law and economics. POSNER, *supra* note 13, at 249.

day, rather than on a generalized understanding of law and economics by those involved.

Twenty-five years later, the situation may be quite different. In this period, an economic approach is discussed in most law schools. Even those soon-to-be-judges and attorneys who have not taken a formal course in law and economics are likely to have been subjected to concepts like efficient breach or the economics of reliance. This factor would lean toward less citation, which could be misleading in terms of influence. In other words, law and economics scholarship might play a role in a decision by becoming part of the intellectual consciousness of a judge or an attorney, rather than by the direct influence of a single scholarly work.<sup>24</sup>

With these limitations in mind, each reader may have different interpretations of the results. Two things seem clear. First, despite limitations on what may be inferred from citation frequency, it seems likely that citations to a sample are a general indicator of the tendency to rely on scholarship in a particular field. Second, citations to works that rely on a mode of reasoning will be correlated with the more general influence of that type of reasoning.<sup>25</sup> Here again, however, caution is advised. Once scholarship is cited to support a position, future courts may simply refer to the earlier citing case rather than to the scholarship. Consequently, a decline in citations does not mean the influence of the scholarship has declined.

One general conclusion is that citation to law and economics scholarship in the context of contract law opinions is not a common occurrence. In 1987, the original fifty-eight works had been cited seventy-six times. Twenty-five years later, the citation count for the original sample had grown to 204. Reliance on Judge Posner's *The Economic Analysis of Law* has increased proportionately when compared to the other works in the study. Omitting the citations to Judge Posner's book, the citation count for the initial study drops to fifty-seven, and in the follow-up to 132. Evidence of direct influence of law and economics scholarship is also rare. As already

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24. This effort does not include a comparison of the influences of different approaches to contract law. For example, no effort has been made to compare the influence of law and economics scholarship with relational contracts scholarship. Interestingly, under "allcases" using WestLaw, the term "relational contract" is found twenty-two times as of December 2011. In many instances the citation is to an article by Charles J. Goetz & Robert E. Scott, *Principles of Relational Contracts*, 67 VA. L. REV. 1089 (1981), which is itself fairly regarded as part of the law and economics literature.

25. Empirical assessments based on *relative* frequency of citation of works representing different contract law philosophies might be an interesting undertaking. These are not part of this effort.



noted, in the original study I found nineteen instances in which a court seemed to be expressly influenced by an economic argument.<sup>26</sup> In the past twenty-five years there were twelve more of these instances. This may not be unique to law and economics but is noteworthy because no other approach to law that I know of has been as broad in scope and as intellectually aggressive with its announcements of what the law *should* be.

When writing twenty-five years ago, I noted five trends in contract law: erosion of the terminable-at-will rule, greater reliance on promissory estoppel, greater incidence of excuse from performance when it has become more difficult, routine awarding of specific performance, and enforcement of liquidated damages clauses.<sup>27</sup> It was impossible to conclude that the economic literature at the time had played much of a role except perhaps in the case of liquidated damages clauses.<sup>28</sup> Although the influence of law and economics scholarship is doubtful, the trends themselves are generally consistent with the teachings of law and economics.

## II. THE SHIFTING NATURE OF LAW AND ECONOMICS SCHOLARSHIP

When this effort was initially undertaken, mainstream law and economics was linked closely to the idea that individuals are rational maximizers of self-interest.<sup>29</sup> Rationality in this context means the ability to make consistent decisions.<sup>30</sup> Self-interest is a bit difficult to pin down, but essentially it means not making decisions simply out of a sense of duty<sup>31</sup> or making choices that are "counter-preferential."<sup>32</sup> Thus individuals were assumed to be rational maxi-

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26. This trend did not increase in the post 1987 period. See Section IV, *infra*.

27. Harrison, *supra* note 1, at 83-98.

28. Harrison *supra* note 1, at 98.

29. For a general discussion of these terms, see Jeffrey L. Harrison, *Egoism, Altruism and Market Illusions: The Limits of Law and Economics*, 33 UCLA L. REV. 1309 (1986).

30. More specifically this means decisions that do not violate the law of transitivity. Thus if one prefers apples to oranges and oranges to pears, he would also prefer apples to pears.

31. See Robert Cooter, *Prices and Sanctions*, 84 COLUM. L. REV. 1523, 1527 & n.9 (1984).

32. Under some definitions of self-interest, it is impossible not to act in a self-interested fashion. Every decision, even one that seems to be altruistic, is seen to be consistent with "psychic utility." Amartya Sen, for one, argues for the possibility of counter-preferential choice. Amartya K. Sen, *Rational Fools: A Critique of the Behavioral Foundations of Economic Theory*, 6 PHIL. & PUB. AFF. 317, 328 (1977).

mizers of their own utility.<sup>33</sup> Although prior to 1987 some questions were raised about what “rationality” and “self-interest” meant, the behavioral underpinnings of the economic analysis of law were relatively fixed and simple. In fairness it is important to note that pioneers in the field of law and economics understood that the validity of their analysis hinged on the legitimacy of these assumptions.<sup>34</sup>

During the past twenty-five years, these assumptions have come under increased pressure from sociologists and economists. More specifically, the fields of behavioral and experimental economics have been closely examining the rationality assumption. Even more recently, scholars have questioned what it is that people maximize.<sup>35</sup> In particular, if people seek to maximize utility, what does that mean and what sorts of things are consistent with that goal?<sup>36</sup>

The current survey consequently takes place in the context of a more skeptical law and economics literature than that which existed twenty-five years ago. This change in the tone of the scholarship is one variable that may affect reliance on law and economics scholarship. Today it has a much more inward-looking quality. Two examples of this more introspective approach come to mind: behavioral economics and the even more recent focus on the determinants of happiness. It is important to examine these two areas, albeit briefly, to understand the ways they may alter judicial dependence on conventional economics scholarship.

#### A. Behavioral Economics

There is an extensive behavioral economics literature that I am only able to touch on briefly here.<sup>37</sup> Nevertheless, the essence of

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33. *Id.* at 322–24. Utility, as will be noted below, usually refers to expected as opposed to actual utility. It is important to note that the utility of one person may be tied to the perceived utility of another. In other words, a parent may increase her utility by pleasing a child. Thus self-interest does not preclude interdependent utility functions.

34. For a brief survey see Harrison, *supra* note 29, at 1320–22.

35. See *infra* pp. 13–16.

36. See generally Jeffrey L. Harrison, *Happiness, Efficiency and the Promise of Decisional Equity: From Outcome to Process*, 36 PEPP. L. REV. 935 (2009).

37. There is a vast number of articles in law alone that address the implications of behavioral economics. One of the earliest is Harrison, *supra* note 29. See also Oren Bar-Gill, *The Behavioral Economics of Consumer Contracts*, 92 MINN. L. REV. 749 (2008); Jeremy A. Blumenthal, *Emotional Paternalism*, 35 FLA. ST. U. L. REV. 1 (2007); Grant M. Hayden & Stephen E. Ellis, *Law and Economics After Behavioral Economics*, 55 U. KAN. L. REV. 629 (2007); Christine Jolls, *Behavioral Economics Analysis of Redistributive Legal Rules*, 51 Vand. L. Rev. 1653 (1998); Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471 (1998); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Sci-*

what has been discovered falls into two categories. One is that even if the assumption of self-interest is accepted, it is not clear what that means. Maybe the best examples are games indicating that people react to what they perceive as the fairness of an outcome. The second category concerns whether people are capable of rational choices.<sup>38</sup>

### 1. What is Self-Interest?

The problem with defining self-interest is illustrated by reference to ultimatum games.<sup>39</sup> In the simplest version of these games, a certain amount of money is given to one party who must obtain the permission of a partner in order to keep the sum. The initial party is given a chance to make a one-time offer of a portion of the money in order to persuade the partner to allow him to keep the rest. If the partner says "no," neither party keeps any amount of the sum offered. One would expect the offering party to offer a very small amount and for the other party to say "yes." The explanation of this is that a "yes" answer leaves both participants better off than a "no" answer. The actual results, however, are that the offering party generally offers more than a very small amount, but when he does offer a small amount, that offer is rejected. In other words the offeree opts to be worse off as a financial matter, a decision inconsistent with the rational self-interest maximization assumption.<sup>40</sup> There is, however, a way this decision can be viewed as consistent with the assumption. The offeree who turns down the low offer includes a sense of fairness in his or her utility function and actually is "better off." The problem is that this is not the conventional way

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ence: *Removing the Rationality Assumption from Law and Economics*, 88 CALIF. L. REV. 1051 (2000); Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499 (1998); Gregory Mitchell, *Why Law and Economics' Perfect Rationality Should Not Be Traded for Behavioral Law and Economics' Equal Incompetence*, 91 GEO. L.J. 67 (2002).

38. This discussion begins *infra* note 45.

39. See generally Werner Guth, Rolf Schmittberger & Bernd Schwarze, *An Experimental Analysis of Ultimatum Bargaining*, 3 J. ECON. BEHAV. & ORG. 367, 368 (1982) (discussing individual self-interest in single and multi-stage bargaining games).

40. An allocation that leaves at least one party better off and no one worse off is said to be Pareto Superior. An allocation leaving at least one party worse off is Pareto Inferior. When there are no allocations that could be Pareto Superior, the current allocation is said to be Pareto Optimal. Paretian standards of efficiency are attractive to some because they avoid the problem of interpersonal comparisons of utility. In the example, rejecting the offer would appear to be a Pareto Inferior move because it entails giving back the money offered. For a brief history of efficiency standards, see Harrison, *supra* note 36, at 942-46.

economics is applied to law. Self-interest is typically a very narrow concept that does not allow for complex emotional reactions.<sup>41</sup>

A more interesting version of the ultimatum game is a classic designed by Richard Thaler. Here subjects are asked the following question:

You are lying on the beach on a hot day. All you have to drink is ice water. For the last hour you have been thinking about how much you would enjoy a nice cold bottle of your favorite brand of beer. A companion gets up to go make a phone call and offers to bring back a beer from the only nearby place where beer is sold (a fancy resort hotel) [a small run-down grocery store]. He says that the beer might be expensive and so asks how much you are willing to pay for the beer. He says that he will buy the beer if it costs as much or less than the price you state. But if it costs more than the price you state he will not buy it. You trust your friend, and there is no possibility of bargaining with the (bartender) [store owner]. What price do you tell him?<sup>42</sup>

In Thaler's experiment, the median answer was either \$2.65 or \$1.50. The higher amount was offered by those buying from the fancy resort and the lower amount was offered by those buying from the run-down store. The beer, however, is exactly the same. There are two possible interpretations, neither of which is in accord with the standard economic model. One is that it exposes irrationality. In other words, how can the same beer be worth both no more than \$1.50 but also up to \$2.65? The more promising possibility is that the respondents had a sense of a fair price depending on who the seller was, and this entered into their valuation of the beer.

In the realm of economic analysis, the same type of influence may affect what is referred to as the efficient breach. Under that theory, a party will breach a contract if he or she could compensate the non-breaching party to the level of his expectancy and still profit by virtue of the breach. This concept has been under fire for some time, but not for reasons related to behavioral economics.<sup>43</sup> What behavioral economics suggests is that the decision to breach may not be a simple matter of profit and loss. The potentially breaching party could actually have a sense of whether it is fair to breach and compensate the non-breaching party with the lowest

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41. See generally Harrison, *supra* note 29, at 1320–26.

42. RICHARD THALER, *THE WINNER'S CURSE: PARADOXES AND ANOMALIES IN ECONOMIC LIFE* 31 (1992).

43. See, e.g., Ian R. Macneil, *Efficient Breach of Contract: Circles in the Sky*, 68 VA. L. REV. 947, 963 (1982).

possible compensation consistent with leaving that party no worse off, at least monetarily. More specifically, one could argue that it is inefficient to breach in these instances because of the negative psychic impact on the potentially breaching party. Put differently, a party may be fully conscious of the fact that his or her wealth will increase by breaching but also sense that breaking a promise is inconsistent with his or her own value system.

## 2. Questions of Rationality

Another facet of behavioral economics has less to do with what people value and more to do with their capacity to process information and make decisions that maximize utility. The importance of this problem is best understood in the context of the theory of “revealed preferences.” In effect the standard economic model discovers what people prefer by examining the choices they make. Under the classical model, choice and preference are locked together. Thus when a choice is made it must be the one that delivers the highest level of utility or satisfaction to the chooser.<sup>44</sup> Studies conducted in behavioral economics suggest this is not always the case.

A great deal has been written about bounded rationality and cognitive biases.<sup>45</sup> As the term suggests, there are a number of limitations on arriving at a rational outcome. Indeed, it may be rational to be irrational when the costs in terms of time and effort exceed the marginal benefit.<sup>46</sup> Even aside from the costs of “rational” behavior, the ability to integrate and interpret information may simply be beyond the capacity of many people. More importantly, there are biases that tend to pull people away from the rational outcome. For example, some exhibit an optimism bias in that they assume incorrectly that the probability of a favorable outcome is higher

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44. See Paul A. Samuelson, *Consumption Theory in Terms of Revealed Preference*, 15 *ECONOMICA* (n.s.) 243 (1948); Paul A. Samuelson, *A Note on the Pure Theory of Consumer's Behaviour*, 5 *ECONOMICA* (n.s.) 61 (1938). See generally Harrison, *supra* note 29, at 1316–21.

45. See, e.g., DANIEL KAHNEMAN, *THINKING, FAST AND SLOW* (2011); MASSIMO PIATTELLI-PALMARINI, *INEVITABLE ILLUSIONS: HOW MISTAKES OF REASON RULE OUR MINDS* 4–5 (1994); Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 *U. CHI. L. REV.* 1203 (2003).

46. See Jean Tirole, *Rational Irrationality: Some Economics of Self-Management*, 46 *EURO. ECON. REV.* 633, 644–46 (2002); Gary S. Becker, *Irrational Behavior and Economic Theory*, 70 *J. POL. ECON.* 1 (Feb. 1962). In other words, decisions that appear to be inconsistent or to violate the law of transitivity may actually be rational when the costs of additional time and information are factored into the analysis.

than it actually is.<sup>47</sup> In other cases, individuals may be susceptible to an anchoring effect.<sup>48</sup> That is, when asked to make a decision or predict an outcome, they do not start from a clean slate but from an anchoring point and adjust from there.

These biases have been studied and have important implications for public policy.<sup>49</sup> Some of this work was completed before the first citation study in 1987.<sup>50</sup> It was only after that time, however, that it began to find its way into mainstream legal scholarship. What this means is that, since the first study, the range of what may fairly be called law and economics literature has changed. On balance the new work is critical of the underlying assumptions that may have made the initial law and economics writings attractive to some. One of my aims is to determine whether this work has had an impact on the willingness of courts to adopt the teachings of law and economics scholarship.

### B. *Happiness and Utility*

More recently, scholars have begun considering a topic that is even more fundamental than advances in behavioral economics. What does it mean to be better off? This leads to more specific questions. For example, how do you measure whether someone is better off? Does better off mean a subjective measure of happiness or is it a function of objective measures like longevity, the availability of health care, or a healthy diet?<sup>51</sup> Revealed preference theory

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47. See, e.g., TALÍ SHAROT, *THE OPTIMISM BIAS: A TOUR OF THE IRRATIONALLY POSITIVE BRAIN* (2011).

48. See KAHNEMAN, *supra* note 45, at 119–28.

49. See materials cited *supra* note 37.

50. For a discussion, see Harrison, *supra* note 29, at 1352–61.

51. See generally ROBERT H. FRANK, *CHOOSING THE RIGHT POND: HUMAN BEHAVIOR AND THE QUEST FOR STATUS* (1985) (discussing the role of status as a motivator in individual behavioral choices); BRUNO S. FREY & ALOIS STUTZER, *HAPPINESS AND ECONOMICS: HOW THE ECONOMY AND INSTITUTIONS AFFECT HUMAN WELL-BEING* (2002); DANIEL GILBERT, *STUMBLING ON HAPPINESS* (2006); JONATHAN HAIDT, *THE HAPPINESS HYPOTHESIS: FINDING MODERN TRUTH IN ANCIENT WISDOM* (2006); JENNIFER MICHAEL HECHT, *THE HAPPINESS MYTH: WHY WHAT WE THINK IS RIGHT IS WRONG* 133–46 (2007) (discussing literature on the linkage between material objects and happiness); RICHARD LAYARD, *HAPPINESS: LESSONS FROM A NEW SCIENCE* (2005); MATTHIEU RICARD, *HAPPINESS: A GUIDE TO DEVELOPING LIFE'S MOST IMPORTANT SKILL* (Jesse Browner trans., Little, Brown & Co. 2006); Jeremy A. Blumenthal, *Law and Emotions: The Problems of Affective Forecasting*, 80 IND. L.J. 155, 165–81 (2005) (discussing social science research regarding people's ability to predict their future feelings); Richard A. Easterlin, *Explaining Happiness*, 100 PROC. NAT'L ACAD. SCI. 11176 (2003); Richard A. Easterlin, *Income and Happiness: Towards a Unified Theory*, 111 ECON. J. 465 (2001); Richard A. Easterlin, *Will Raising the Incomes of All Increase the Happiness of All?*, 27 J. ECON. BEHAV. & ORG. 35 (1995); *Interpersonal*

comes into play here as well. The standard economic assumption is that people maximize utility by making choices they deem most satisfying. And, the theory goes, we know what maximizes that utility by observing choices. The problem is that the way one anticipates feeling as a result of a choice—in this case, the choice to make a contract—does not always turn out to be how one actually feels. In short, expected utility, the realm of traditional economic analysis, does not necessarily match up with actual utility or happiness.<sup>52</sup>

This realization is at the heart of ongoing studies about the factors that account for happiness. For example, according to some theories, people have a set level of happiness that they may rise above or sink below, but only temporarily.<sup>53</sup> The idea that contracts are enforced to give a non-breaching party his or her expectancy becomes entangled with the possibility that one may be just as happy in the long run even if subject to a breach of contract without compensation. As extreme as it may seem, this gives rise to the question of just how important it ultimately is to enforce all contracts.

For example, suppose you have a contract to purchase a new fancy sports car to be delivered in two months. At the time of expected delivery, the seller informs you that the car has been sold to someone else and will not be replaced. Standard contract remedies require awarding you the difference between the price you would have paid for the car and what you will have to pay for a substitute. But what we know now is that the successful purchase of the car may have resulted in only a short-term boost in happiness. On a practical level, you can relate to this by thinking of the number of times you very badly wanted something—say, a new coat or jewelry—but were disappointed. In a few months, the sense of disappointment or desire is extinguished and the article actually turns out not to be as important as it seemed.

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*Comparisons of Well-Being* (Jon Elster & John E. Roemer eds., 1991); Tiffany A. Ito & John T. Cacioppo, *The Psychophysiology of Utility Appraisals*, in *WELL-BEING: THE FOUNDATIONS OF HEDONIC PSYCHOLOGY* 470 (Daniel Kahneman et al. eds., 1999); Richard E. Lucas et al., *Reexamining Adaptation and the Set Point Model of Happiness: Reactions to Changes in Marital Status*, 84 *J. PERS. & SOC. PSYCH.* 527 (2003). The most comprehensive review of the literature is found in Peter Henry Huang, *Happiness Studies and Legal Policy*, 6 *ANN. REV. L. & SOC. SCI.* 405 (2010).

52. See Harrison, *supra* note 36, at 946–48.

53. Richard E. Lucas et al., *supra*, note 51. The notion of a set point is debatable as individuals may readjust their expectations. See Peter A. Ubel & George Loewenstein, *Pain and Suffering Awards: They Shouldn't be (Just) about Pain and Suffering*, in *LAW AND HAPPINESS* 195 (Eric A. Posner & Cass R. Sunstein eds., 2010).

Or consider one of your most miserable experiences—say, a long hike during which it rained and you became lost. At the time, it was the source of great unhappiness or disutility. Later, however, the experience brings about a sense of achievement. The sense of having experienced the negative event actually results in positive feelings. As it turns out, studies indicate that there is a difference between an experience and the memory of that experience.<sup>54</sup> Time can reshape your feelings. The question then becomes: what is the relevant happiness or utility, that which occurs contemporaneously with the experience or the feeling one has about it in years to come?

In reality there are at least three ways to look at this. There is the difference between expected utility (decisional) and what actually happens. In addition there is a difference between how you felt at the time of the experience and how you recall it. Finally there may be unpleasant experiences that are accurately recalled but result in a sense of pride or happiness, even if it is only the result of being able to discuss the experience with others. These studies of happiness have broad implications for contracts that are just beginning to be fleshed out. For example, promissory estoppel is based on the idea that people's reliance on promises may be to their detriment. The suggestion is that reliance on a promise has made their positions worse. It is likely that when people hear that a promise has been broken, they are less happy than had they learned otherwise. There is little distinction here between being injured and suffering some other type of loss. At least some studies suggest that people "get over" these losses and return to their *ex ante* state of happiness. It has already been suggested that these findings warrant a reassessment of tort remedies.<sup>55</sup> The logic of this argument applies equally to contract remedies, at least in non-commercial settings. Enforcing promises may not make that much difference and expectancy may be overrated as a contract remedy.

I want to avoid too broad of a statement about the personal impact of enforcing or not enforcing awards of contract damages. Contract law and even promissory estoppel play an important role in reducing transaction costs. If these contracts and promises are

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54. Daniel Kahneman et al. capture this distinction, distinguishing "decision utility" from "experienced utility." See Daniel Kahneman, Peter P. Wakker & Rakesh Sarin, *Back to Bentham? Explorations of Experienced Utility*, 112 Q.J. ECON. 375 (1997).

55. See Andrew J. Oswald & Nattavudh Powdthavee, *Death, Happiness, and the Calculation of Compensatory Damages*, in *LAW AND HAPPINESS* 217 (Eric A. Posner & Cass R. Sunstein eds., 2010).



not enforced, transaction costs and risk would increase. The increase in costs of transacting may lead to fewer resources available for other sources of happiness. In addition, risk itself is typically something people pay for or avoid. In effect, even if people eventually reach their original levels of happiness, they may incur happiness-reducing costs in that process. If one adds to this that the parties are not individuals but business entities, the analysis is even murkier.

The question in the context of this study is fairly straightforward. Since this survey was initially conducted, both behavioral economics and happiness studies have captured the attention of a great number of economists and those who apply economics to law.<sup>56</sup> The overall impact, if any at all, would be to decrease the attractiveness of traditional economic models as a supplement to judicial analysis. I consider this hypothesis in the section that follows.

### III. SURVEY RESULTS

#### A. *An Overview*

One must be cautious about making claims about the results of an informal study like this one. Nevertheless, a few judgments are relatively easy to make. Some are about quantitative matters and some are more qualitative and, admittedly, even impressionistic. With respect to quantitative matters, based on the sample examined here, one cannot conclude that law and economics scholarship has increased its citation frequency since the initial study twenty-five years ago. As noted above, with respect to the original sample there were seventy-six citations as of 1987. Since that time there have been 127 more. In the initial period, citations to Judge Posner's book accounted for 27% of the citations. In the second period, his book (in all editions) accounted for 40% of the citations.

Because it is difficult to compare these time periods in any exact way, I developed a standard of measurement. The average age of the works examined in the initial study at the time of that study was eleven years. Since there were fifty-eight works examined, a computation can be made for what I am going to call "article-years." This can be thought of as the cumulative number of years all articles were available for citation. The first sample included a total of

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56. See materials cited at *supra* notes 37 & 51.

638 article-years.<sup>57</sup> If the seventy-six citations are divided by 638 article-years the result is 0.12 citations per work per year.

In the twenty-five year period since the initial study, there were 127 citations to those same works. Although there were more total citations, there were also substantially more article-years since each article is now twenty-five years older.<sup>58</sup> In fact, twenty-five years multiplied by fifty-eight works means there were 1,450 article-years. Dividing the number of citations by article-years results in a citation rate of 0.087 citations per article-year. In short, the articles in the initial sample have been cited more often overall in the second period but substantially less often per article-year than they were in the period leading up to 1987. Of course this may not be indicative of an ultimate loss of influence. As noted earlier, once a case has been cited, later courts may simply cite the case in which the work was originally cited.<sup>59</sup> This may explain a decline in citations.

Another reason for not equating these quantitative results with influence relates to the different perspectives one may take. If the total number of citations is an indicator of influence, the second twenty-five year period would appear to be one of greater influence. After all, law and economics as an *area* of scholarship is cited more often. This could be strictly a function of having more years to be influential but that would not distract from the overall or gross impact. On the other hand, there are more years and fewer cites per article-year than in the initial period. This would suggest that the reliance on law and economics, while obviously still positive, is declining. In effect each article becomes less influential as time passes.<sup>60</sup> To put this differently, with respect to the original study, articles were available to be cited during a much shorter period of time than in the second study. In breaking the analysis into averages, my goal is to make sure that the original sample's impact is not understated simply because it was available for fewer years.

Another hypothesis that could explain the declining citation rate of the original sample is that the earlier works are being replaced or crowded out by newer ones. There is no methodologically sound way of determining if this is the case, but in an effort to gain

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57. This was calculated by multiplying 58 by 11.

58. In effect twenty-five years were added to the eleven year average found as of 1987.

59. A next step in the analysis would be to focus on those works that have been influential and to determine the frequency of citation of the holding they influenced.

60. One could say that the marginal influence of the sample is still positive but declining.

some insight I selected twenty articles using the same subjective standards used to select the original. Some articles are by the same authors as those in the original sample and others are by younger but prolific scholars.<sup>61</sup> On average, the articles were published eleven years ago, which means a total of 220 article-years. The total number of citations was five, which means an average of 0.02 citations per article-year.<sup>62</sup> In contrast, over the last eleven years the original sample has been cited a total of forty-five times over 495 article-years. This means a citation rate of 0.07 times per article-year. Even if Judge Posner's book, with twenty-one of the total citations, is excluded, the citation rate is 0.05 citations per article per year.<sup>63</sup> If these numbers are representative of the aggregate, one interpretation is that the older articles have *not* been crowded out by newer ones.

There are of course a number of reasons why the more recent works might be cited less frequently by courts. An educated guess is that the original set of articles addressed specific mainstream doctrinal issues in contract law that were likely to be the subject of dispute.<sup>64</sup> Although it is admittedly impressionistic, the more recent articles, or at least those selected here, tend to be more theoretical. Of course theoretical works may lead to several more practical ones that are cited, and their importance will never be fully gauged. As a general matter, the analysis so far suggests that the pre-1990 works in law and economics as they relate to contract law represent the core law and economic scholarship of the area. They are thus more likely to be cited.

Another possible explanation for a lower citation rate is the huge volume of literature in behavioral economics. This literature calls into question some of the basic assumptions of the traditional analysis that characterized most of the works included in the original sample. The more nuanced view of law and economics resulting from the teachings of behavioral economics could result in some

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61. The list is found in Appendix B.

62. This rate is calculated by dividing 5 into 220. The average is used here in order to normalize for the different lengths of time articles were available in the first sample as compared to the second sample.

63. There is little doubt that the presence of Judge Posner's *An Economic Analysis of Law* accounts for a great deal of the "power" of the original sample. Because Judge Posner's book has gone through multiple editions one could argue it should be included in both samples. The propositions for which it is typically cited were in the first few editions and it would be misleading to count them as part of the recent sample of scholarship.

64. One can get a feel for this by comparing the titles in Appendix A with those in Appendix B.

hesitation to rely on the earlier and more conventional works. To examine this question, I determined the number of instances the phrases “behavioral economics” and “behavioral law and economics” were used at any time in the “allcases” database. There were only seven citations with the oldest being in the year 2000. Interestingly, two of the seven were citations to a work by Judge Posner.<sup>65</sup>

To further examine this issue, I selected a sample of articles addressing directly the subject of behavioral economics.<sup>66</sup> Again the sample was not random but based on my judgment about which articles were likely to be influential. The thirteen articles selected were cited a total of ten times. Although they were recognized in a positive manner, there was no indication that those articles had been used by judges to reject the conventional economic analysis of contract law in any but a tangential manner.<sup>67</sup> In short, at least based on a citation analysis, one would have to reject the hypothesis that conventional law and economics articles are relied on less frequently because of the onslaught of behavioral economics works.<sup>68</sup>

In one more exercise, I examined the possibility that the rapidly developing literature on happiness as an alternative to expected utility as a measure of utility has had an impact on law and economics citations. Perhaps the most comprehensive treatment of happiness as it relates to law is a collection of articles published by *The Journal of Legal Studies* in 2009, and subsequently published in book form in 2010.<sup>69</sup> These articles were devoted to a variety of topics. Searches using a number of terms resulted in no findings that this literature has had an impact.<sup>70</sup> It may be that it is too soon to detect an impact. On the other hand, the application of that literature to contract law is not as obvious as the application of traditional economics,<sup>71</sup> and most of the theories related to happi-

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65. Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551 (1998).

66. These are found in Appendix C.

67. For example, half of the citations were to John D. Hason & Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1420 (1999), which discusses the way in which the presentation of data or information can impact markets. These works comment on the standard economic assumptions but have not yet influenced actual contract rules.

68. In order to be completely accurate, it should be noted that even this hypothesis rests on the assumption that law and economics articles are relied upon less. This is based on citation and cannot account for the other ways in which law and economics scholarship may affect judicial reasoning.

69. LAW AND HAPPINESS (Eric A. Posner & Cass R. Sunstein eds., 2010).

70. The search terms used were the authors' names, the titles of the articles, and the title of the collection.

71. For a detailed discussion, see Harrison, *supra* note 36, at 987–88.

ness and law are insufficiently developed to be operational at this time.<sup>72</sup>

In sum the sample selected twenty-five years ago is cited less frequently. One might posit that those articles have been superseded by more recent scholarship but that does not appear to be the case. In fact, overall, it appears that citation to law and economics works has become less frequent. Hypotheses that this is the result of inroads made by behavioral economics or by happiness studies cannot be supported on the basis of the data collected here.

### B. A Closer Look

#### 1. Some Quantitative Observations

A closer look at the data reveals some outcomes that are inconsistent with a view that the influence of law and economics scholarship has declined. For example, in the 1987 study, thirty-three of the citations to law and economics scholarship were by federal courts and fourteen of those were by the Seventh Circuit Court of Appeals.<sup>73</sup> This likely reflected the acceptance by Judges Posner and Easterbrook of the law and economics approach. In the post-1987 period there were sixty-seven citations by federal courts and only nineteen were by the Seventh Circuit Court of Appeals. Although it is not clear that this is statistically significant, the very clear implication is that the influence of law and economics scholarship has spread beyond the Circuit with which it is most readily identified. A specific example of this process is Richard Epstein's 1984 article on terminable-at-will contracts.<sup>74</sup> In the 1987 study, the article had been cited five times and in all instances it was by the Seventh Circuit Court of Appeals.<sup>75</sup> Since then, it has been cited twelve more times and only three of the new citations are by the Seventh Circuit.

While this growing influence of law and economics scholarship holds true from an overall perspective, it is not a uniform phenomenon. One curious example is Anthony Kronman's seminal article on mistake and the duty to disclose information in the context of contract formation.<sup>76</sup> The article presents the traditional economic argument for not requiring parties to a contract to disclose infor-

72. See generally Jeffrey L. Harrison, Book Review, 21 U. FLA. J.L. & PUB. POL'Y 413 (2010) (reviewing LAW AND HAPPINESS, *supra* note 69).

73. See Appendix A.

74. Epstein, *supra* note 19.

75. See Appendix A.

76. Anthony T. Kronman, *Mistake, Disclosure, Information, and the Law of Contracts*, 7 J. LEGAL STUD. 1 (1978); see also Jeffrey L. Harrison, *Rethinking Mistake and*

mation that they have invested to gather. Kronman's theory is that people invest in information when they are able to internalize the benefits of that investment. This investment, so the argument goes, assists the process of resources finding their way to their most valuable uses.<sup>77</sup> If parties to a contract were always required to disclose information, they would be unable to internalize the benefits of their information gathering and valuable investment would decline. When information is not discovered by virtue of an investment, there is no efficiency rationale for allowing non-disclosure.<sup>78</sup>

In the 1987 study, Kronman's work was found to have been cited four times. In all cases, it was by the Seventh Circuit Court of Appeals. By 2011 the article had been cited seven more times and all but one of the citations were by the Seventh Circuit Court of Appeals. Although the Kronman article presents an economic rationale for disclosure and non-disclosure, it has typically been cited to support non-disclosure.<sup>79</sup> Of the eleven total citations, seven are found in opinions written by Judge Posner. This suggests that some scholarly works may become favorites of particular judges and be cited whenever a case arises that deals with the issue addressed by the article. Thus a work of scholarship may become more frequently cited as its appeal spreads to judges in other courts or it may be repeatedly cited by the same judge as it becomes part of his or her mental library. In the second case, the work is less influential than in the first case. In addition it is important to keep in mind that the scholarship may fall out of the picture completely as subsequent courts cite the court that was initially influenced.

As a more general matter, the patterns of citation suggest that law and economics scholarship is relied on more frequently when the law is not clear or is in the process of change. As already noted, wide citation to Richard Epstein's article on employment termination likely is a function of change in the law of terminable-at-will employment. The article by Charles Goetz and Robert Scott on liquidated damages is also cited relatively frequently, and in this instance the law seems to be on the move as well.<sup>80</sup>

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*Nondisclosure in Contract Law*, 17 GEO. MASON. L. REV. 335 (2010) (discussing Kronman's article).

77. Kronman, *supra* note 76, at 2.

78. *Id.* at 13–14.

79. The lone exception appears to be *United States v. Mahaffy*, No. 05-CR-613, 2006 WL 2224518 (E.D.N.Y. Aug. 2, 2006).

80. Goetz & Scott, *supra* note 14. In part this trend can be traced to a policy of enforcing the liquidated damages clause if the clause is reasonable at the time of contracting or at the time of the breach. See RESTATEMENT (SECOND) OF CONTRACTS § 356 (1981); see also *United States v. Hayes*, 633 F. Supp. 1183, 1185 (M.D.N.C.

On the other hand, the substance of Kronman's article explains why well-settled law makes economic sense. Scholarship defending the *status quo* when it is not under attack is not as likely to be needed by a court.

## 2. A More Qualitative Examination

Although the numbers suggest varying conclusions with respect to the influence of law and economics, an examination of actual decisions indicates that an economic way of thinking about issues has penetrated judicial reasoning. Here the focus is not on the number of citations. Instead, the inquiry centers on the development of an economically influenced manner of reasoning and discussion and on the diverse courts which employ this reasoning. For example, although the theory of efficient breach hardly explains the evolution of the expectancy measure of damages, courts have an appreciation of how the theory supports expectations. Thus as Justice Mosk of the Supreme Court of California observed in a 1995 opinion, "The efficient breach occurs when the gain of the breaching party exceeds the loss to the party suffering the breach, allowing movement of resources to their more optimal use. Contract law must be careful 'not to exceed compensatory damages if it doesn't want to deter efficient breaches.'"<sup>81</sup> In gauging the impact of law and economics on the vocabulary of courts, most telling is the trend in the use of the term. As noted earlier, "efficient breach" is used 131 times as determined by the methodology employed

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1986) (stating that it has been the modern trend to allow liquidated damages clauses in contracts); *Rohlin Constr. Co. v. City of Hinton*, 476 N.W.2d 78, 79 (Iowa 1991) (recognizing a change in contractual interpretations consistent with the trend of favoring liquidated damages).

81. *Freeman & Mills, Inc. v. Belcher Oil Co.*, 900 P.2d 669, 682 (Cal. 1995) (Mosk, J., concurring in part and dissenting in part) (quoting RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 107-08 (3d ed. 1986)). At the heart of the efficient breach notion is that no party is made worse off (at least in a monetary sense) by virtue of the breach. See also *Allapattah Servs., Inc. v. Exxon Corp.*, 61 F. Supp. 2d 1326 (S.D. Fla. 1999) (noting that intentional breaches are sometimes encouraged when they are efficient and wealth-enhancing).

This is not to say that every court adopting the economic view has applied it correctly. One case in which the application appears to be incorrect is *Specialty Tires of America, Inc. v. CIT Group/Equipment Financing, Inc.*, 82 F. Supp. 2d 434 (W.D. Pa. 2000). In *CIT Group*, the court reasoned that it was efficient to excuse the performance of a party who would otherwise be in breach of contract because the plaintiff would simply be put in the position it was in before making the contract and, thus, would be no worse off. 82 F. Supp. 2d at 441. In actuality, the plaintiff was made worse off if one views the making of the contract as having created a legitimate expectancy.

here. The term was only used eleven times as of 1987, when the initial study was conducted.

Similarly, in the context of an early termination fee, a federal court in New York noted the usefulness of penalty clauses:

There are several potential benefits to an agreed punitive measure of damages. A party who wants to convince others of her trustworthiness may choose to accept a penalty clause in order to increase her credibility. Similarly, a penalty clause may compensate a seller for a high risk of default, enabling the seller to take greater risks and charge lower prices. In addition, a penalty clause may be the only means to provide true compensation to a promisee whose idiosyncratic wants would not be compensated by the standard expectation measure of contract damages.<sup>82</sup>

The court expressed skepticism about what it termed the “Chicago” approach to the issue but seemed to accept possible economically beneficial effects of such clauses.<sup>83</sup>

Economic reasoning has also been brought to bear in the analysis of contingency fees. Thus according to the Texas Supreme Court:

Attorney contingency fee contracts serve two main purposes. First, they allow plaintiffs who cannot afford to pay a lawyer upfront to pay the lawyer out of any recovery. Second, because they offer the potential of a greater fee than might be earned under an hourly billing method, such contracts compensate the attorney for the risk that the attorney will receive no fee whatsoever if the case is lost. The lawyer in effect lends the value of his services, which is secured by a share in the client’s potential recovery.<sup>84</sup>

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82. *Spirit Locker, Inc. v. Evo Direct, LLC*, 696 F. Supp. 2d 296, 306 (E.D.N.Y. 2010).

83. *Id.* at 307–08. As in the case discussed immediately above, this court also stumbled a bit on its economic analysis. One of its concerns about liquidated damages clauses is that they may discourage the efficient breach. *Id.* at 305. However, this seems unlikely. A liquidated damages clause can be seen as giving one party the “right” to performance similar to specific performance in that the party that would prefer to breach will not do so. Like a right to specific performance, parties may bargain for liquidated damage amounts that do not deter the efficient breach. See JEFFREY L. HARRISON, *LAW AND ECONOMICS IN A NUTSHELL* 151–53 (5th ed. 2011).

84. *Arthur Andersen & Co. v. Perry Equip. Corp.*, 945 S.W.2d 812, 818 (Tex. 1997) (internal citations omitted); see also *In re McCoy Farms*, 417 B.R. 17, 23 (Bankr. N.D. Ohio 2009); *Ketchum v. Moses*, 17 P.3d 735, 742 (Cal. 2001). *But see*



Similar economic reasoning has been advanced to support the use of form contracts. As an example, in a recent Ohio case, the court observed:

[T]he law does not require that each aspect of a contract be explained orally prior to signing the contract. A party to a contract is responsible for reading what he signs . . . . Nevertheless, the Ohio Supreme Court has declined to require more specific disclosures when arbitration is concerned, reasoning that form contracts lower transaction costs and benefit consumers through lower prices.<sup>85</sup>

More broadly, in *Bidlack v. Wheelabrator Corporation*,<sup>86</sup> the court noted the potential application of the backbone of law and economics—the Coase Theorem<sup>87</sup>—when it discussed the possibility that parties can contract around court-determined rules: “We should recognize initially that, when those affected by a chosen default rule can easily bargain around it to agree to a mutually beneficial course, the rule choice will generally make little difference to the parties’ actual agreement.”<sup>88</sup> Indeed courts have recognized the relevance of the Coase Theorem forty-seven times.<sup>89</sup> This may not

*Kenseth v. Comm’r*, 114 T.C. 399, 413 (T.C. 2000) (finding attorneys’ fees to be merely a cost of litigation).

85. *Wallace v. Ganley Auto Grp.*, No. 95081, 2011 WL 2434093, at \*6–7 (Ohio Ct. App. June 16, 2011). The best-known examples of judicial recognition of the capacity of form contracts to lower transaction costs are *Carnival Cruise Lines, Inc. v. Shute*, 499 U.S. 585, 593–94 (1991) and *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1451 (7th Cir. 1996).

86. 993 F.2d 603 (7th Cir. 1993).

87. Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960). For a discussion of the Coase Theorem see JEFFREY L. HARRISON & JULES THEEUWES, *LAW & ECONOMICS* 81–100 (2008).

88. *Bidlack*, 993 F.2d at 612.

89. This is based on a search for “The Problem of Social Cost” in the “all-cases” database of Westlaw. Not all of these instances involve contract law but, ultimately, the Coase Theorem is about the capacity of market transactions to settle what would otherwise be legal disputes. Another example, albeit in the context of a tort case, is *Comet Delta, Inc. v. Pate Stevedore Co.*, 521 So. 2d 857 (Miss. 1988). The case involved rice damaged by coal dust. The Mississippi Supreme Court noted:

Again assuming an *ex ante* perspective, which party could have prevented this loss at the least cost? Assuming, for example, that it was necessary to fumigate the rice and permit inspection by SGS Control Services, the buyer’s agent, our judicial task would be to identify factually the various precautionary options open to the parties that might have prevented the contamination loss, and, as well, the cost of each such option. Considering then those options open to Comet Delta and, in turn, the options available to Pate, the law’s burden ought fall upon that party which, at zero transaction costs, could have prevented the loss at the least cost. That party is said to be the least cost risk bearer, to use the increasingly familiar lingo. *Cf.* Goetz, *Law and Econom-*

be an impressive number for an article as well known to economists and lawyers as Coase's classic,<sup>90</sup> but for the first twenty years of its existence—from 1960 to 1980—it was cited but six times.<sup>91</sup>

Also pertinent as a measure of the penetration of economic analysis into judicial opinion is the use of the term “transaction costs.” Transaction costs are the costs incurred in reaching an agreement.<sup>92</sup> High transaction costs deter contract formation and low ones make contract formation more likely. The most well-known application of transaction costs is found in Coase's *The Problem of Social Cost*.<sup>93</sup> Again using the database “allcases,” the term appears a total of 653 times.<sup>94</sup> Prior to 1990, the term was used 139 times, and before 1960, the year *The Problem of Social Cost* was published, the term appeared but once.<sup>95</sup> By 1987, the date of the initial study, the term had appeared ninety-three times. In the twenty-five years since 1987, the usage of the term tripled over the number of times used since 1987. Clearly transaction costs have become part of the day-to-day vocabulary of courts.

These examples are far from exhaustive. The breadth of the topics addressed, as well as the jurisdictions represented, suggest

*ics*, 118-27 (1984). In other words, that party which, *ex ante*, could have prevented the loss at the least cost should be burdened in law with the risk and consequently the loss . . . . The seminal discussion of this idea is Coase, *The Problem of Social Cost*, 3 J. Law & Economics 1, 1-28 (1960). *Id.* at 862.

90. By contrast the article has been cited 3100 times in works of legal scholarship. This is based on searching “The Problem of Social Cost” in the Westlaw “TP-ALL” database.

91. *See, e.g.*, *Ira S. Bushey & Sons, Inc. v. United States*, 398 F.2d 167, 171 n.7 (2d Cir. 1968). Interestingly, this first citation was by Judge Friendly, who regarded the Coasian solution as “unlikely to occur in real life.” *Id.*

92. The concept was first introduced by Ronald H. Coase in his 1937 article *The Nature of the Firm* using the terminology “marketing costs.” Ronald H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* (n.s.) 386, 394 (1937). In his 1960 article, *The Problem of Social Costs*, he refers to the “cost of market transactions.” Coase, *supra* note 87, at 15. The term “transaction costs” seems to appear more generally in both his book and short articles. *See generally* Ronald H. Coase, *THE FIRM THE MARKET AND THE LAW* 174-79 (1990); Ronald H. Coase, *The Nature of the Firm: Origin*, 4 *J.L. ECON. & ORG.* 3 (1988).

93. Coase, *supra* note 87, at 15.

94. Specifically excluded were cases that also included any of the following terms: “bank,” “institution,” “refinancing.” These terms would likely be found when transaction cost actually refers to a fee. Not all instances in which the term was used were examined but a random check of seventy-five instances indicated the usage was consistent with the Coasian meaning.

95. In this one instance the term is actually “financial transaction costs,” which is not consistent with modern usage. *State ex rel. Cowles v. Butts*, 170 So. 715, 716 (Fla. 1936).

that economic reasoning, or an effort to apply it, has become common in opinions dealing with contract matters. This is the sort of subterranean effect that may not be fully appreciated by focusing only on citations.

### CONCLUSION

Revisiting a work you completed twenty-five years ago can be a sobering exercise. That early examination of the first wave of law and economics scholarship suggested that citation was infrequent. There are a number of explanations, including the most important one: much of contract law was consistent with the teachings of law and economics. Still, two interesting conclusions seem to be relatively safe. First, law and economics was not responsible for any of the current trends in contract law at the time. Second, although citations were not frequent, they were disproportionately found in courts that were promoting a law and economics perspective. Nevertheless, a citation count alone may not fully capture long-term effects.

The current effort produced a more complex combination of results. With respect to the original sample of scholarship selected, citation frequency has declined. It does not appear that these earlier works have been replaced by newer ones or that they have been affected by the more nuanced view offered by behavioral economics. As in the initial study, it would be difficult to conclude that law and economics scholarship has played a role in *shifting* any basic contract law tenets.<sup>96</sup>

Principally law and economics has provided a rationale for already existing positions. This is somewhat consistent with the view that common law judges, who were not familiar with economics in a formal sense, either intuitively responded to the logic or coincidentally arrived at economically sensible outcomes.<sup>97</sup> More importantly, this update suggests that citation frequency may not be the best measure of the influence of law and economics generally. The reasoning and vocabulary of courts at all levels and in the context of a variety of issues indicates that, whether by way of citation or not, law and economics has penetrated contract law. Thus, returning to my original question, does scholarship matter? The answer appears to be that some of it does, but tracing this influence is not an easy matter.

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96. As one would expect in all cases of appeals to authority, citation seems to be most frequently in the context of areas of law that are evolving.

97. See POSNER, *supra* note 13, at 249–53.

APPENDIX A

*Guide to notations:*

N = Case cites article in string cite or for matter unrelated to economic analysis of contract law

R = Economic reasoning of article discussed in opinion

I = Case appears influenced by economics found in Article

\* = Cases were decided after the initial study in 1987

*Expanded 1987 Study*

Elliot Axelrod, *Specific Performance of Contracts for Sales of Goods: Expansion or Retrenchment in the 1980's*, 7 VT. L. REV. 249 (1982).

John H. Barton, *The Economic Basis of Damages for Breach of Contract*, 1 J. LEGAL STUD. 277 (1972).

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Robert L. Birmingham, *Legal and Moral Duty in Game Theory: Common Law Contract and Chinese Analogies*, 18 BUFF. L. REV. 99 (1969).

David W. Carroll, *Four Games and the Expectancy Theory*, 54 S. CAL. L. REV. 503 (1981).

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Koenings v. Joseph Schlitz Brewing Co., 377 N.W.2d 593, 604 n.11 (Wis. 1985). (I).

Wassenaar v. Panos, 331 N.W.2d 357, 362 n.7 (Wis. 1983). (I).

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\*Akers v. RSC Equipment Rental, Inc., No. 4:09CV2022 HEA, 2010 WL 2757284, at \*3 (E.D. Mo. July 12, 2010). (N).

\*Margiotta v. Christian Hosp. Ne. Nw., 315 S.W.3d 342, 346 (Mo. 2010). (N).

\*Lynn v. Gen. Elec. Co., No. 03-2662-GTV-DJW, 2005 WL 701270, at \*7 n.29 (D. Kan. 2005). (N)

\*Garcia v. Kankakee Cnty. Hous. Auth., 279 F.3d 532, 536 (7th Cir. 2002). (N).

\*Mackenzie v. Miller Brewing Co., 623 N.W.2d 739, 743 n.9 (Wis. 2001). (N).

\*Foster v. BJC Health Sys., 121 F. Supp. 2d 1280, 1287 (E.D. Mo. 2000). (N).

\*Riad v. 520 S. Mich. Ave. Assocs., 78 F. Supp. 2d 748, 755 (N.D. Ill. 1999). (N).

\*Crawford-El v. Britton, 93 F.3d 813, 836 (D.C. Cir. 1996). (N).

\*Anderson v. Douglas & Lomason Co., 540 N.W.2d 277, 281 (Iowa 1995). (N).

\*Rowe v. Montgomery Ward & Co., 473 N.W.2d 268, 283 (Mich. 1991). (R).

\*McKnight v. Gen. Motors Corp., 908 F.2d 104, 109 (7th Cir. 1990). (N).

\*R.S. & V. Co. v. Atlas Van Lines, Inc., 917 F.2d 348, 352 (7th Cir. 1990). (R).

\*Kern v. Levolor Lorentzen, Inc., 899 F.2d 772, 783 (9th Cir. 1990). (N).

\*McClendon v. Ingersoll-Rand Co., 779 S.W.2d 69, 74 (Tex. 1989). (N).

\*Bullock v. Auto. Club of Mich., 444 N.W.2d 114, 132 n.2 (Mich. 1989). (R).

\*Foley v. Interactive Data Corp., 765 P.2d 373, 399 (Cal. 1988). (N).

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\*Arrowhead School Dist. No. 75 v. Klyap, 79 P.3d 250, 257 (Mont. 2003). (I).

\*Conagra, Inc. v. Nierenberg, 7 P.3d 369, 385 (Mont. 2000). (N).

\*MetLife Capital Fin. Corp. v. Wash. Ave. Assocs., 732 A.2d 493, 498 (N.J. 1999). (N).

\*DAR & Assocs. v. Uniforce Services, Inc., 37 F. Supp. 2d 192, 201 (E.D.N.Y. 1999). (I).

\*Nohe v. Roblyn Dev. Corp., 686 A.2d 382, 384 (N.J. Super. Ct. App. Div. 1997). (N).

\*Nat'l Emergency Servs., Inc. v. Wetherby, 456 S.E.2d 639, 641 n.2 (Ga. Ct. App. 1995). (N).

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\**Consumer Prod. Distribs., Inc. v. Toy Town Pit Stop, Inc.*, 2011 Mass. App. Div. 42, 46 (Mass. Dist. Ct. 2011). (R).

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- \*Hemenway v. Peabody Coal Co., 159 F.3d 255, 257–58 (7th Cir. 1998). (R).

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- \*Manouchehri v. Heim, 941 P.2d 978, 983 (N.M. Ct. App. 1997). (N).
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