Instrumental Theories of Compensation: A Survey

RICHARD CRASWELL*

TABLE OF CONTENTS

I.	Int	VTRODUCTION	
II.	Some Early Similarities		1139
	А.	Efficient Breach and Efficient Performance	
		1. Permitting Efficient Breaches; Deterring Inefficient Ones	1139
		2. Defining "Compensatory" Damages	
	В.	Liability Rules and Efficient Takings	1143
		1. Damages Under Liability Rules	1143
		2. Damages Under Property Rules	
	С.	Precautions Against Probabilistic Injuries	1145
	D.	Damages as Efficient Insurance	
III.	THE PARTING OF THE WAYS		1149
	А.	Efficient Insurance	
	В.		
		1. Ways of Influencing Victims' Behavior	1154
		2. Victims' Behavior and Other Relevant Incentives	1155
	С.	Efficient Pricing and Levels of Activity	1157
		1. Prices and Enterprise Liability	1158
		2. Cross-Subsidization and Adverse Selection	
	D.	Efficient Precautions by Wrongdoers	

^{*} William F. Baxter-Visa International Professor of Law, Stanford University. I have benefited from comments and suggestions from Jordan Barry, Abraham Bell, Barbara Fried, A. Mitchell Polinsky, and participants in a workshop at the Stanford Law School and in the conference on What Do Compensatory Damages Compensate? held at the University of San Diego Institute for Law and Philosophy February 28–March 1, 2003.

Ì	E. Efficient Precontractual Investigation	
	1. Investigation of Potential Risks	
	2. Search for Contracting Partners	
	3. Other Information Gathering	
ŀ	F. Efficient Enforcement	
	1. The Chance of Escaping Punishment	
	2. Optimizing on Enforcement Expenditures	
(G. Efficient Breach and Efficient Takings	
	1. Property Rules Versus Liability Rules	
	2. Property Rules and Penalty Defaults	
	3. Efficient Damages Under Liability Rules	
	4. The Effect on Other Incentives	
E	ECONOMICS CONTRASTED WITH CORRECTIVE JUSTICE	

I. INTRODUCTION

To begin with an obvious point, economists and philosophers often disagree. As a result, lawyers who are influenced by one or the other of those disciplines will often disagree as well.

Compensation, however—the subject of this symposium—might seem to be a topic on which many economists and philosophers could agree. Compensatory remedies can be and have been defended from the standpoint of corrective justice, on the theory that corrective justice requires that a wrongdoer compensate those she has wronged.¹ But compensatory remedies have also been defended by economists, and by others who rely on instrumental arguments, on the theory that compensatory remedies promote efficiency. If both sets of arguments are correct, then these groups should be able to unite—at least in a marriage of convenience—to endorse compensatory remedies.

This paper's task is to argue (albeit reluctantly) against that happy union. In the process, I will survey the economic or instrumental arguments for compensation in some detail, for the benefit of those who may not have kept up with the economics literature. But this is a survey with a purpose, which is to demonstrate the very different role that the concept of "compensation" plays in economic as opposed to moral theories.

In particular, in theories of corrective justice it is often taken as axiomatic—or, at least, as defining of "corrective justice"—that the wrongdoer should compensate the wronged. Elevating compensation to the status of an axiom may, of course, conform to many widely held moral intuitions. However, it has proven surprisingly hard to move from

^{1.} For convenience, and consistency with much of the corrective justice literature, I will often refer to the party being made to pay damages as the "wrongdoer" in the case. This is purely a linguistic convenience: I do not intend to imply that wrongdoing is a necessary condition for liability, much less to endorse any particular theory of "wrong."



IV.

this sort of axiom to any concrete conclusions about what, precisely, compensation should include in any particular case. For example, if compensation consists of restoring the victim to some position he had a right to occupy, a substantive theory of rights is needed to define the baseline position. Even then, as the papers in this conference illustrate, difficult problems can still arise in defining that baseline in unusual circumstances—for example, how much should one arsonist have to pay if another arsonist had already lit a fire that would have independently consumed the victim's house? Moreover, even if we agree conceptually on what ought to be compensated—"the loss of the house," let us say—still further difficulties arise in trying to translate that loss into some specific number of dollars and cents. In a nutshell, if the entitlement to compensation has simply been posited as a foundational axiom, it is hard to get much purchase on second-order questions like these.

By contrast, in economic analysis the concept of compensation enjoys no such axiomatic status. Instead, the optimal measure of damages from an economic standpoint is simply whatever measure of damages would create the best consequences—the best incentives to take precautions against accidents, for example; or the best incentives to gather information before signing a contract; or the best incentive to do any of a hundred things. Obviously, the quantum of damages that happens to be best at achieving these instrumental goals need not coincide with the quantum (if any) that would be dictated by some moral theory of compensation.

As I will argue in the body of the paper, this aspect of economic analysis has two important implications. First, economic analysis does have a way—in principle, at least—of answering the various secondorder questions about compensation, even down to questions about the proper amount in dollars and cents. To be sure, the instrumental calculations needed to answer these questions with full precision may be too complex to be humanly manageable, at least in the present state of our knowledge. Thus, my claim is not that economics actually produces definitive answers: certainly not answers that are precise to two decimal places. Instead, my first claim is simply that economics—unlike most theories of corrective justice—at least offers a method *in principle* for answering those questions. As a result, economics also offers some basis against which arguments for one answer or another can be evaluated.

Second, however, economics faces a special difficulty of its own, which is that the measure of damages that is best for any one

instrumental effect may not be the measure that is best for other effects. Indeed, from an economic standpoint, there may not be any *single* best remedy, or at least not any single remedy that is easily characterized. Instead, it may be more accurate to speak of "the remedy that is best at creating incentives for efficient precautions," or "the remedy that is best at minimizing total risk-bearing costs," and so on for every other relevant consequence. To be sure, there will almost always be some measure of damages that is best "all things considered," after each possible measure has been assessed for its effect on *all* the possible consequences. But there is no reason to suppose that this amount that is best "all things considered" will necessarily coincide with anything that could plausibly be labeled as compensation, in the sense of measuring the value of some discrete right or interest.

Put slightly differently, the concept of compensation itself plays no independent role in economic analysis. Thus, the relevant economic question is never, "What is the value of a human life?" (or the value of an arm, or a house, or a child). Instead, the relevant economic question is, "What measure of damages, if awarded whenever a human life is lost, will create the best consequences, all things considered?" Thus, even if the number that best answers this question might plausibly be *called* compensation, the plausibility (or not) of that label plays no role in the economic case for awarding that particular measure. By contrast, in most corrective justice theories, the moral case for awarding any particular measure of damages depends entirely on the plausibility of viewing that measure as "compensation" for the wrong. As a result, corrective justice theorists must concern themselves with the very *meaning* of "compensation," while economists are free to ignore that question.

Why, then, might it sometimes seem that economists share a commitment to compensatory remedies, albeit on grounds of efficiency rather than of morals? As discussed in Part II, this characterization of economic analysis may have been appropriate in the 1970s and 1980s, which were relatively early in the application of economic analysis to the law. In those days, the earliest economic models identified a relatively small set of remedies as likely to be most efficient (for various purposes). Significantly, the remedies identified by those early analyses often did coincide with common notions of compensation.

For example, in contract law, early analyses showed that expectation damages would often create efficient incentives to perform or breach. Moreover, expectation damages could very easily be characterized as compensating the victim for the loss of the value that full performance of the contract would have yielded—or, as Fuller and Perdue famously put

it, compensating the victim for the loss of his "expectation interest."² In this case, then—and in other similar cases in tort and property law, which are also discussed below—it was easy to conclude that economics supported compensatory remedies.

As I discuss in Part III, however, economic analysis during subsequent decades has complicated this simple picture. In brief, the remedies identified by early analyses might still be efficient for some instrumental purposes, but often they will not be efficient for others. More fundamentally, once we see that different damage awards may be more (or less) efficient for different purposes, it is also easy to see how little the economic arguments depend on whether any of those awards can be labeled compensatory. From the standpoint of modern economics, the analysis is instrumental all the way down, so the concept of compensation does no meaningful work.

II. SOME EARLY SIMILARITIES

Let me begin with the earlier analyses, which suggested that the most efficient remedies would indeed correspond to relatively simple notions of compensation. I describe below the analysis developed for remedies for breach of contract, because that is the field with which I am most familiar. But similar analyses were also applied to remedies in tort law and property, so I will occasionally refer to those fields as well.

A. Efficient Breach and Efficient Performance

Suppose, then, that A has contracted to sell a unique widget to B for \$200. Suppose further that B plans to put the widget to some use which is worth \$250 to him. But suppose that there is a third buyer, C, who wants the widget for some more urgent purpose in which the widget would be worth \$300 to C.

1. Permitting Efficient Breaches; Deterring Inefficient Ones

Most economic analyses start with the premise that, on the facts as stated, it would be efficient for the widget to end up in the hands of C

^{2.} L.L. Fuller & William R. Perdue, Jr., *The Reliance Interest in Contract Damages:* 1, 46 YALE L.J. 52, 54 (1936) [hereinafter Fuller & Purdue I); L.L. Fuller & William R. Perdue, Jr., *The Reliance Interest in Contract Damages:* 2, 46 YALE L.J. 373 (1937).



because the widget is worth more to C than it is to B.³ Obviously, the soundness of this premise depends on what the numbers in the above example represent, and in what sense the widget is "really" worth \$250 to B or \$300 to C. I will return to this issue below, when I discuss the implications this analysis might have for how compensation should be measured.

For now, though, let us accept the premise that an efficient outcome requires the widget to end up being used by C. What the earliest economic analyses showed is that a remedy giving B \$250 for the loss of the widget—"expectation damages," in contract parlance—should in fact lead the widget to end up in C's hands. That is, if A will have to pay \$250 in damages if she fails to deliver the widget to B, this means that A will have no interest in breaking her contract unless C offers to pay more than \$250. Otherwise, A would get less from C than she would have to pay in damages, so the breach would not be profitable for A.

Fortunately, if the widget is actually worth \$300 to *C*, then *C* should be willing to pay *A* more than \$250 for the widget, and *A* should be willing to accept. In that event, *A* will keep whatever amount *C* pays in excess of \$250 (since *A* must pay \$250 over to *B* in damages). Meanwhile, *C* will end up profiting as long as *C* pays *A* less than \$300 for the widget, because the widget is worth a full \$300 to *C*. In the end, then, *A* and *C* should agree on a price somewhere between \$250 and \$300; *A* will then deliver the widget to *C*, and *B* will collect \$250 in damages. As this leaves the widget to end up—this analysis came to be known as the "theory of efficient breach."⁴

Of equal importance, the early analyses showed that a \$250 remedy also produced the desirable effect of deterring inefficient breaches. Suppose, for example, that instead of C we have a third buyer, D, to whom the widget is worth only \$150. Because the widget is worth less to D than it is to B (recall that B values the widget at \$250), this means it would be inefficient for the widget to end up in D's hands. But this should never happen, as long as A has to pay \$250 in damages if she breaks her contract with B. That is, if the widget is worth only \$150 to D, there is no price D would be willing to pay that would cover A's

^{4.} As I discuss in Part II.B, there may be other remedies that will also lead to this efficient outcome, especially if the parties can easily renegotiate. For now, the only claim of interest is a nonexclusive one: that compensatory damages are *one* remedy that can move the widget to its most efficient destination.



^{3.} For early versions of this analysis, see Robert L. Birmingham, *Breach of Contract, Damage Measures, and Economic Efficiency*, 24 RUTGERS L. REV. 273 (1970); John H. Barton, *The Economic Basis of Damages for Breach of Contract*, 1 J. LEGAL STUD. 277 (1972).

damage liability, so A should simply decline D's offer and deliver the widget to B. In this way, damages of \$250 should permit efficient breaches while deterring inefficient breaches.

2. Defining "Compensatory" Damages

In this example, the efficient remedy (\$250) could also be labeled a "compensatory" remedy. That is, a \$250 award gives *B* the exact amount that the widget would have been worth to him. Thus, this award can easily be described as *compensating B* for the loss of that widget.

Indeed, from an economic standpoint, the efficient damage award should reflect the widget's actual, subjective value to B. To be sure, in a corrective justice theory, it might not be obvious whether "compensation" should mean compensating B for the market value of his loss, or for his lost subjective value, or for some other value entirely. From an efficiency standpoint, however—at least to the extent that our goal is deterring inefficient breaches while permitting efficient ones—B's subjective value will usually be the most efficient measure.

For example, suppose that the widget has a market value of only \$50, but *B* nevertheless values it at \$250, perhaps because *B* is a passionate collector of widgets, who needs this one to complete his collection. Those who think economists care only about market value might expect that economic analysis would then identify \$50 as the truly compensatory remedy. In fact, though, the early economic analysts—insofar as they were focused on the goal of deterring inefficient breaches—identified \$250 as the remedy best suited to serve that goal. That is, if *B* will suffer a \$250 loss if he fails to receive the widget, economists argued that it would be inefficient to give the widget to someone else, unless that someone else would lose even more than \$250 if he failed to receive the widget.⁵ From this standpoint, a \$50 remedy would be too low, for that would allow *A* to breach the contract and sell

^{5.} See, e.g., Donald Harris et al., Contract Remedies and the Consumer Surplus, 95 LAW Q. REV. 581, 585, 609 (1979); Timothy J. Muris, Cost of Completion or Diminution in Market Value: The Relevance of Subjective Value, 12 J. LEGAL STUD. 379, 400 (1983). As Richard Posner has put it:

If I refuse to sell for less than \$250,000 a house that no one else would pay more than \$100,000 for, it does not follow that I am irrational, even if no "objective" factors such as moving expenses justify my insisting on such a premium. It follows only that I value the house more than other people. This extra value has the same status in economic analysis as any other value. RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW § 3.7, at 55 (6th ed. 2003).

¹¹⁴¹

the widget to someone like D who values it far less than B does.

Another difference between the economic and the corrective justice analyses is that it is unnecessary, under an economic approach, to decide whether *B* actually *owns* the widget in order to identify \$250 as the efficient remedy. To be sure, if compensation were defined as compensation for *loss of ownership*, as it easily might be under a corrective justice theory, we would first have to decide what *B* owns before we could decide what compensation was due. As Fuller and Perdue pointed out long ago, we cannot simply *assume* that *B* owns the right to the widget, without some justification for that assumption. For example, if we were to start instead with the premise that *B* owns merely the right not to be made worse off *by A's having contracted with him*, *B* might then be entitled (under a corrective justice theory) only to compensation for his reliance damages.⁶

Significantly, though, the instrumental or "efficient breach" analysis sidesteps this question of ownership. If *B* values the widget at \$250, and *D* values it at only \$150, then it is efficient for the widget to end up in *B*'s hands, whether or not we say that *B* actually owned the widget. In fact, even if *B did not* own the widget, it would still be efficient for the widget to *end up* in *B*'s hands, as long as the widget is truly worth more to *B* than to D.⁷ For example, even if *B* and *D* had no contractual dealings at all, and even if neither had any moral claim to *A*'s widget, we would still reach an efficient outcome (meaning that the widget would be transferred to *B* and not to *D*) if *A* were suddenly under an obligation to pay *B* \$250 in damages if she for any reason refused to make that transfer.

To be sure, there may be other economic reasons *not* to place A under such an obligation, especially if A and B are complete strangers with no contractual dealings. But the only claim of the efficiency analysis is a narrow one—to wit, that among the effects produced by such an obligation would be the economically desirable effect of making sure the widget ends up at its most efficient destination. More specifically, the claim is that this will be the effect *if* damages for breach of the obligation are set at \$250 or however much the widget is actually worth to B.

In short, the goal of the early instrumental theories, at least in the form under consideration here, was to encourage A to break the contract only if there was another buyer who would, in fact, get more value from the widget than B would get from it. One way to encourage those breaches,

^{7.} As Daniel Friedmann has noted, the instrumental effects identified in the analysis of efficient breach could also be produced by employing merely compensatory remedies in any case involving "efficient theft." Daniel Friedmann, *The Efficient Breach Fallacy*, 18 J. LEGAL STUD. 1, 4 (1989).



^{6.} Fuller & Perdue I, *supra* note 2, at 62–63.

while simultaneously discouraging any others, was to require A to pay strictly compensatory damages if he failed to deliver the widget to B. To best achieve the instrumental goal of the theory, the most efficient measure of damages was whatever value B would, in fact, have gotten from the widget. Finally, that measure of damages would be the efficient one *whether or not* it happened to coincide with any definition of "compensation" for B's loss.

B. Liability Rules and Efficient Takings

At about the same time, a similar analysis developed in connection with takings and nuisances in the law of real property. The classic article here, of course, is Calabresi and Melamed's examination of property and liability rules.⁸ "Property rules," in Calabresi and Melamed's terms, trigger injunctive remedies against violators, so that portion of their analysis is less relevant to the topic of compensation (though I will return to this issue later, in Part III.G). For now, the key point is that Calabresi and Melamed's analysis of liability rules rested on arguments that were very similar to the early analyses of efficient breach.

1. Damages Under Liability Rules

Specifically, suppose that a factory is deciding whether to emit pollution that would reduce the quality of life enjoyed by surrounding landowners. An economic analysis would ask how much the factory could gain by polluting, and how much the surrounding landowners would lose. Indeed, an efficiency analysis (insofar as it focused solely on the decision to pollute) would begin with the premise that the factory should emit the pollution if, but only if, the gain to the factory exceeded the loss to the landowners. This is exactly parallel to the premise of the efficient breach theory, which said that the widget should be delivered to C if and only if the gain C would get from the widget exceeded the loss that B would suffer.

Once this is seen, the rest of the argument follows easily. If the factory is required to pay damages that exactly equal the surrounding landowners' losses, the factory will then have no incentive to pollute *unless* its gains from polluting exceed the landowners' losses. In that case, though, it

^{8.} Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972).



is actually efficient for the factory to pollute, so this outcome fulfills the instrumental goal. If, instead, the factory were to gain less from polluting than the landowners would lose, then it would not be efficient to pollute. But in that case, the threat of damages equal to the landowners' losses should deter the factory from polluting—which is just as it ought to do, if polluting would not be efficient.

In addition, this analysis had similar implications for exactly how the landowners' losses should be measured. That is, just as in the contracts example, efficient incentives in these models could be achieved by setting the damages equal to the actual losses the landowners suffer—meaning, in this case, the difference between (a) the landowners' quality of life without the pollution, and (b) their quality of life if the factory polluted. Granted, this reduction may be difficult to measure, for market values may be as irrelevant in this example as they were to the passionate widget collector. Conceptually, though, the instrumental analysis gave a clear answer to the question of what the law should *try* to measure. And this instrumental answer—unlike the answers provided by corrective justice—did not depend on any prior decision as to whether the landowners already owned the right to be protected against this loss.

2. Damages Under Property Rules

Of course, Calabresi and Melamed went on to contrast this method of calculating damages with the protection provided by what they called a "property rule."⁹ For example, under a property rule, the factory might be prohibited from polluting unless it offered the landowners enough money to pollute. Calabresi and Melamed pointed out that this rule might *also* produce efficient outcomes, for the factory would not be willing to offer enough money to get the landowners' permission unless the factory's gain from polluting did, in fact, exceed the landowners' losses.

Significantly (for our purposes), efficient outcomes under a property rule do not require the use of compensatory damages. Under a property rule, all that matters is that the damages be large enough to deter the factory from polluting without having first secured the landowners' permission. As a result, efficient outcomes under a property rule could be achieved with much larger measures of damages, including injunctive relief (backed by fines for contempt) or even criminal sanctions. In this respect, the early analyses of takings and nuisances did not imply that compensatory remedies were the *only* way that efficiency could be achieved.

Indeed, much the same point was quickly made about the desirability

^{9.} Id. at 1089–93.

of compensatory damages in contract law. That is, while compensatory damages might be *one* way to create efficient incentives to perform or breach, efficient incentives might also be created by property rules if the remedy of specific performance were made freely available.¹⁰ Like an injunction in property law, specific performance requires the would-be breacher to perform the contract unless the other party agrees to permit the breach, perhaps upon payment of some fee. And if the breach is efficient—meaning that the gains to the breaching party exceed the losses to the nonbreacher—then the breacher should be willing and able to offer the nonbreacher more than the performance would have been worth, in which case the two parties should agree to permit the breach. Such payments are the exact analog, in contract law, of the payments that might be offered by the factory to the surrounding landowners, if the landowners were protected by a property rule.¹¹

In short, almost as soon as the first efficiency arguments were formulated, qualifications and complexities began to appear. Indeed, these complexities (as well as many others) form the basis of my discussion of the more recent analysis in Part III of this paper. Before proceeding to that discussion, though, two other early instrumental goals must be introduced. As we will see, the damage measures that were most efficient at serving those goals were also easy to characterize as "compensatory" damages.

C. Precautions Against Probabilistic Injuries

Suppose now that A is a manufacturer deciding whether to spend money on better quality control, to reduce the risk of a defect in her product. At present, there is a 10% chance that any product A sells will be defective, but if she adopts the more expensive system of quality control, the chance of a defect will be eliminated. To make the example more concrete, let us suppose that each time there is a defect, A's

^{11.} For discussions of this sort of renegotiation in connection with contract remedies more generally, see (in addition to the articles cited *supra* note 10) Ian R. Macneil, *Efficient Breach of Contract: Circles in the Sky*, 68 VA. L. REV. 947 (1982); Richard Craswell, *Contract Remedies, Renegotiation, and the Theory of Efficient Breach*, 61 S. CAL. L. REV. 629 (1988).



^{10.} For an early analysis cast in exactly these terms, see Anthony T. Kronman, *Specific Performance*, 45 U. CHI. L. REV. 351 (1978). These arguments were further developed in Alan Schwartz, *The Case for Specific Performance*, 89 YALE L.J. 271 (1979), and in Thomas S. Ulen, *The Efficiency of Specific Performance: Toward a Unified Theory of Contract Remedies*, 83 MICH. L. REV. 341 (1984).

customers lose value equal to \$200, either through being injured physically or from having a less functional product. In the first case, if physical injury is involved, A might be liable under tort law. In the second case, A might be liable under contract law for breach of warranty—but in either case, the economic analysis will be much the same.¹²

From an efficiency standpoint, A should spring for the better quality control system if the benefits from doing so (fewer defects) exceed the costs. If \$200 is really an accurate measure of how much her customers lose from each defect—more on this in Part III—then reducing those losses by 10% can be thought of as saving each customer \$20 in expected value (0.10 x \$200 = \$20). If we further suppose that A's customers are risk-neutral, then they will evaluate these savings in precisely those terms: They would willingly pay up to \$20 to eliminate all risk of a defect. If so, then the most efficient outcome is for A to adopt the better system of quality control system if, but only if, it costs her less than \$20 per product. Significantly, this is exactly what A will have an incentive to do, if the legal system requires her to pay \$200 in damages for each and every defect.¹³ If A does not spend more money on quality control, we have already said that her products will be defective 10% of the time, and each defect will injure her customers by \$200. As a result, A will have to pay \$200 on 10% of her sales, which works out to the equivalent of paying \$20 per sale. By contrast, if A spends the additional money on quality control, we have said that none of her products will be defective, so she will not have to pay anything in damages. This means that A can profit by installing the better quality control and eliminating her legal liability if, but only if, the better quality control costs less than \$20 per product.

As a result, *A*'s incentives are now exactly in line with the conditions under which better quality control would be more efficient. In other words, a damage measure set equal to the victims' actual losses—\$200, in this example—should give potential defendants an incentive to take the efficient level of precautions against accidental injury, as well as giving them an incentive not to deliberately commit inefficient acts (as

^{13.} For a formal model of this incentive in connection with contract remedies, see Lewis A. Kornhauser, *Reliance, Reputation, and Breach of Contract*, 26 J.L. & ECON. 691 (1983). The analogous argument in tort law—that strict liability can give potential tortfeasors an incentive to take an efficient level of precautions, if the measure of damages is set so that the tortfeasor internalizes all of her victims' losses—goes back even earlier. *See, e.g.*, GUIDO CALABRESI, THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 68–94 (1970).



^{12.} The similarities and differences (from an economic standpoint) are nicely described in Robert Cooter, *Unity in Tort, Contract, and Property: The Model of Precaution*, 73 CAL. L. REV. 1 (1985).

discussed in the two preceding sections).¹⁴ Given this similarity in the outcomes of these different strands of economic analysis, it is hardly surprising that many scholars came to believe that compensatory damages were generally efficient.

Moreover, the economic analysis of probabilistic injury also had implications for how "compensatory" damages should be defined, just as it did in the preceding sections. That is, as long as A and her customers are risk-neutral, A's incentives will be efficient only if the damages she pays are tied to the actual losses her customers suffer, if and when a product is defective. This remains true even if some of those losses are purely intangible (for example, if the defective widget doesn't quite match the other ones in B's living room), or even if the losses are not strictly related to anything in A's contract with B (for example, the defect causes B to become dissatisfied with the entire idea of collecting widgets, so what was once a source of great pleasure to him now seems hollow and empty). As long as these are losses that B would not have suffered if the widget had not been defective, then they are losses that will be affected by A's decision concerning quality control. From an efficiency standpoint, therefore, these are losses that A ought to consider when making her decision.

To be sure, there may be other reasons or other instrumental goals that counsel in the opposite direction, suggesting that some of these losses should not be included in the measure of damages. Many of these reasons will be discussed later, in Part III of the paper. For now, the only relevant point is a narrow one: In the simplest analysis of the incentive to take precautions, one way to create efficient incentives is to include *all* resulting losses in the legal measure of damages.

D. Damages as Efficient Insurance

Finally, there is one other instrumental goal that might also be achieved by compensatory damages, at least in the simplest economic models. If some probability of an injury will always remain, in spite of A's precautions, potential victims such as B may want insurance against those injuries. And if B is risk-averse but A is not—and if private insurance

^{14.} If A's customers will always be fully informed of any risks associated with her product, this may give A a market incentive to produce better products regardless of whether the law makes her pay any damages for defects. In order to focus on the effect of different damage measures, I make the standard assumption that A's customers are not perfectly informed about the risks her products pose.



against such losses is for some reason unavailable—compensatory damages may provide exactly the efficient level of insurance.

The analysis here is straightforward.¹⁵ To say that a party is "riskaverse" is to say that she would prefer to eliminate any risk of fluctuations in her welfare, even if she had to pay something to do so. By contrast, a party who is "risk-preferring" would be happier with a 50% chance of a large gain, even if that meant also accepting a 50% chance of a large loss. And a party who is "risk-neutral" would be equally happy with either of those options—either a sure thing, with no risk of fluctuation whatsoever; or an evenly-balanced chance between a large gain and an equally large loss.

While any of these attitudes toward risk is of course possible, cases involving risk-averse victims provide an additional justification for compensatory damages. If a risk-averse victim faces, say, a 10% risk that some product will turn out defective, but if the victim can then be given a legal remedy that will prevent her from suffering any loss in welfare (once the remedy is paid), that remedy will have effectively eliminated any risk of suffering a loss. In fact, if the remedy could truly offset any loss in welfare, it would guarantee that the victim achieves the same welfare no matter what happens: either she will get a functioning product, or she will get the equivalent in the form of a legal remedy.

This guarantee of a fixed level of welfare is precisely what a riskaverse victim will prefer. By contrast, any higher or lower remedy would leave the victim facing some ups or downs in her potential welfare (potential ups, in the case of higher remedies; or potential downs, in the case of lower ones). Thus, the analysis of victims' attitudes toward risk cannot only provide a potential justification for compensatory damages; it can also answer the question of how "compensation" should be defined. To achieve this particular instrumental goal—the goal of providing the level of insurance that risk-averse victims would want—compensatory damages should be set as close as possible to the level that would truly make the victim indifferent between (a) not suffering the wrong in the first place and (b) suffering the wrong but collecting damages.

In summary, at the time these early economic analyses were

^{15.} For a more systematic treatment of these issues, see A. Mitchell Polinsky, *Risk Sharing Through Breach of Contract Remedies*, 12 J. LEGAL STUD. 427 (1983). For simplicity, my discussion in the text will assume that the wrongdoing party is risk-neutral. However, the general character of the analysis—though not the specific conclusions—would remain much the same even in the more complex case in which the wrongdoing party was risk-averse as well. Risk aversion on the part of wrongdoers will be briefly considered *infra* at note 51, in connection with the effect on optimal enforcement.



developed—around 1980 or so—it might have seemed obvious that compensatory damages were efficient. In addition, it might also have seemed that economic analysis could answer the difficult second-order questions about how compensatory damages ought to be calculated or defined (namely, by setting damages at a level that would make victims subjectively indifferent to whether the wrong took place or not). As a consequence, it might well have seemed that instrumental analysts and corrective justice theorists shared a good deal of common ground.

III. THE PARTING OF THE WAYS

But that was then, and this is now. As I describe below, economic analyses produced during the last fifteen or twenty years have significantly softened the earlier conclusion that compensatory remedies were necessarily efficient.

To be sure, this is not to say that compensatory remedies are *never* efficient. The older models remain valid within their limits, and in many cases the remedies those models identified may well be the most efficient ones. What it does mean, though, is that the analysis is necessarily more complicated than it once was.

In particular, recent analyses have emphasized that there are many different instrumental goals to be served, and the remedy that is most efficient in serving one goal might not be most efficient in serving another. To use the economic jargon, there are many different "margins" along which parties might adjust their behavior, and different remedies may have different effects along each of those margins. Thus, even if it is possible to identify the remedy that is unquestionably efficient in its effect on one particular consequence, that same remedy may not be the one that optimizes other consequences. As I said at the outset, this complicates the analysis considerably.

To better illustrate this point, each of the following sections will consider a different consequence (or a different margin). Specifically, the first section surveys the efficiency of the insurance provided by different remedies. The next two sections discuss the efficiency of the incentives that each remedy creates for victims to adjust their own behavior. The fourth and fifth sections focus on the incentives that remedies create for the potential wrongdoer, either to take precautions to reduce the risk of a probabilistic harm, such as the harm caused by a defective product; or to take any of several precautions before a contract has even been signed. The sixth section considers the efficient level of

enforcement costs, and the effects that imperfect enforcement might have on the size of the most efficient remedy. Finally, the last section returns to the example with which I began, by considering the effect of remedies on a wrongdoer's incentives to refrain from a nonprobabilistic injury, such as a deliberate breach of contract or a deliberate taking.

A. Efficient Insurance

I begin, though, with more recent analyses of efficient insurance. In Part II.D of this paper, I considered the example of a manufacturer whose products posed a 10% risk of a defect, where the defect (if it occurred) would cause users of the product to lose \$200. In particular, I suggested that risk-averse users would want an insurance policy that compensated them for the full amount of their loss (\$200). If private insurance were for any reason unavailable, it might then be efficient for the law to provide such insurance in the form of a fully compensatory damage remedy—*if* users of the product were risk-averse.

But what if users are not risk-averse? If users are instead riskpreferring, then (by definition) they would rather go without full insurance. By going without full insurance, risk-preferring users gain a chance of a greater benefit if the product they buy is not defective, for in that case they will get full use of the product without having to pay insurance premiums. True, users who go this route are also accepting the risk of a smaller benefit (or even an outright loss) if the product does turn out to be defective, for in that case they will not have insurance to cushion their losses. By definition, though, a risk-preferring user will happily accept the chance of a greater loss, in order to get the equal chance of a greater benefit. Thus, to the extent that the law is trying to achieve efficient levels of insurance, damages should be less than fully compensatory when victims are risk-preferring.

Granted, the practical significance of this example is limited, for there are probably few (if any) real-world situations in which most victims are risk-preferring. There are, however, many other situations that have similar implications for the efficient level of insurance, and hence for the efficiency of undercompensatory remedies. In particular, undercompensatory remedies may be efficient (insofar as the effect on insurance is concerned) when the loss is a *nonpecuniary* one that does not affect the victim's monetary needs.

Consider, for example, a couple whose wedding photographs are ruined by the negligence of the photographer.¹⁶ Let us stipulate that the loss of these photographs represents a real loss to the couple, perhaps a

^{16.} Carpel v. Saget Studios, Inc., 326 F. Supp. 1331, 1332 (E.D. Pa. 1971).



substantial one. If so, then the couple would likely want the photographer to spend a good deal on precautions to reduce the likelihood of such a loss.

In this section, however, we are not considering the efficient level of precautions, but rather the efficient level of insurance. (The effect of remedies on the photographer's level of precautions will be taken up later, in Part III.D.) And just because the couple might want lots of precautions to prevent this loss from occurring, it does not follow that the couple must also want an insurance policy that would pay them lots of money, if and when the loss did occur. Instead, this couple might well prefer to be less than fully insured against the loss, which suggests that efficient levels of insurance might be achieved by less than fully compensatory damages.¹⁷

The reason the couple might prefer less than full insurance stems from the relationship between insurance and the marginal utility of money. Most economists find it plausible to suppose that the marginal utility of money declines at higher levels of wealth, meaning that the last dollar a person has will be less valuable (to that person) than the first. If so, then it is entirely rational for such a person to be risk-averse and to prefer full insurance against any calamity that would leave him with smaller amounts of money. By buying full insurance, the person must settle for having somewhat less money in the event that he is lucky and no calamity occurs (in which case he will have paid the insurance premiums and gotten nothing for them). The benefit, of course, is that full insurance guarantees that the person will have *more* money—more money, that is, than if he hadn't purchased the insurance—in the event the calamity does strike.

In effect, then, insurance allows a policyholder to transfer money away from some possible states of the world (those in which the calamity does not strike) and into other possible states of the world (those in which it does). Significantly, such a transfer makes perfect sense if the states of the world in which the calamity strikes are also those in which the policyholder would have less money, because of the calamity's pecuniary effects (hospital bills, repair costs, direct financial

^{17.} The formal economic analysis of this issue is due to Philip J. Cook & Daniel A. Graham, *The Demand for Insurance and Protection: The Case of Irreplaceable Commodities*, 91 Q.J. ECON. 143 (1977). Applications of this analysis to legal issues include Samuel A. Rea, Jr., *Nonpecuniary Loss and Breach of Contract*, 11 J. LEGAL STUD. 35 (1982); Alan Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis*, 97 YALE L.J. 353 (1988).

losses, etc.). That is, if the marginal utility of money truly is greater when the policyholder has less of it, it makes perfect sense for the policyholder to want to give up some money in states where he has more of it, in order to receive more money in states where he has less. This is why risk-averse policyholders should want insurance policies that fully compensate them against any pecuniary losses.

However, the logic of this argument simply does not apply to insurance against *non*pecuniary losses, such as the couple's loss of their wedding pictures. If their pictures are destroyed, the couple may feel that the quality of their life is now poorer, but they will still have just as much money as they would have had if this loss had been averted. As a result, there is no reason to think that money will have a greater marginal value to the couple in this state of the world (the state in which their pictures are destroyed) than in any other state. This implies that there is no reason for the couple to want an insurance policy that would give them more money if and when their pictures are destroyed, if the same policy would also leave them with less money (because of the insurance premiums) whenever their pictures turn out fine. In other words, if the success or failure of the couple's wedding pictures has no effect on their need for money, why would they want their insurance or other financial policies to depend on the presence or absence of their wedding pictures?

Put more simply, the problem here is that insurance cannot restore the lost pictures, but can only replace them with money. If there were a way of restoring the pictures themselves, the couple might well want to pay for an insurance policy that would give them the replacements. But to purchase an insurance policy that pays off only in *cash*, and does not replace the actual pictures, is simply to make a financial gamble: It is a bet that pays off with more money in some states of the world and less money in other states. While people who like gambles may be attracted to such a policy—people who like to gamble are "risk-preferrers," in economic jargon—there is no reason for couples who are risk-averse to be so attracted.¹⁸

To be sure, many losses with which the law is concerned inflict both

Insurance provided by way of *tort* remedies produces more complex distributional effects, at least in torts between parties who lack any contractual relationship. In those cases, the insurance will not have to be paid for in the form of a higher contract price, so the provision of extra insurance represents a kind of subsidy to potential victims. An analogous point remains, though: If the loss is a nonpecuniary one, risk-averse victims would prefer to receive the equivalent subsidy in the form of a simple cash transfer, rather than in the form of a lottery ticket that gives them extra money only if their wedding pictures happen to be destroyed.



^{18.} At least, there is no reason for such couples to be attracted to a *contract* remedy that provides full insurance, for (as a first approximation) they will have to pay the "premiums" for that insurance in the form of a higher price for their photographs.

pecuniary and nonpecuniary costs. An auto accident may leave the victim with a great deal of pain and suffering (which is usually a nonpecuniary cost); but it will also leave the victim with medical bills (a pecuniary cost), and having to pay those bills will surely increase the marginal value of money. Indeed, even a seemingly nonpecuniary cost, like the loss of wedding pictures, could have pecuniary implications if (for example) the loss was so devastating that the couple had to seek expensive therapy. As should be apparent from the discussion above, the classification of a loss as pecuniary or nonpecuniary does not turn on anything intrinsic to the loss itself. Instead, that classification turns entirely on the effect of the loss on the victim's marginal utility of money. More specifically, it turns on whether the victim's best response to the loss-whether that involves going to a hospital, going into therapy, or doing nothing at all-increases the marginal utility of money to the victim, relative to the marginal utility that money would have if the loss had never been suffered.

In short, whenever nonpecuniary losses are involved, there is an argument that damages should be less than fully compensatory, insofar as we are concerned with providing efficient levels of insurance. To be sure, efficient levels of insurance are not the *only* thing that matters to efficiency, and subsequent sections will consider the ways in which this conclusion must be altered once other instrumental goals are taken into account. Even before we get to those other goals, however, the basic point should be clear. The argument that economic efficiency requires fully compensatory damages does not apply as widely, and is certainly not as simple, as was once believed.

B. Efficient Behavior by the Victim

The preceding section considered the effect of remedies on the level of insurance that victims effectively received. But legal remedies (or their absence) can also affect victims' actual behavior, including behavior that might either contribute to or mitigate the effects of the wrongdoer's behavior. For example, if contracting parties were assured full compensation for all of their losses, no matter how foolishly they behaved, they might then have an incentive to take extra risks (secure in the knowledge they would be compensated),¹⁹ or to run up their damages

^{19.} In the technical economics literature, the form of victim behavior that is most often analyzed is the victim's decision about how heavily to invest in a contractual

needlessly by continuing to perform after the other party has already announced its breach. Similarly, in tort cases we might worry about the effect of legal remedies on the victim's incentive not to commit contributory negligence, or the victim's incentive not to assume unnecessary risks.

1. Ways of Influencing Victims' Behavior

Of course, there are many ways in which the law might alter victims' incentives. For example, under the traditional contributory negligence rule in tort law, victims who were found to have behaved "unreasonably" were denied any recovery at all. The mitigation requirement in contract law is in some respects similar, as it reduces the damages paid to victims who behave unreasonably after the breach. These doctrines are similar in that each requires the court to evaluate the victim's actual behavior, and each imposes a sanction, in the form of reduced recovery, only on those victims whose behavior is found wanting.²⁰

Notice, though, that these doctrines involve extra administrative costs, by requiring courts to evaluate the victim's behavior. They may also introduce additional uncertainty, and additional risk of judicial error, by leaving it to courts to decide what kind of behavior is "reasonable." For these reasons, it may sometimes be easier to influence victims' incentives by reducing the damages paid to all victims, without any inquiry into whether any particular victim behaved reasonably. In effect, such a rule would be a form of strict liability on victims, making victims bear the loss whether or not they have behaved reasonably. Such a rule would also resemble the deductibles or coinsurance payments that are often found in private insurance plans.²¹ For example, if all victims were limited in their recovery to 80% of truly compensatory damages, that would leave victims bearing 20% of their losses. As a result, victims would then have some incentive to moderate their own behavior, in order to reduce their chances of getting stuck with the uncompensated 20%.

relationship, if some or all of that investment might be rendered worthless should the contract be breached. See, e.g., Tai-Yeong Chung, Incomplete Contracts, Specific Investments, and Risk Sharing, 58 REV. ECON. STUD. 1031 (1991); Aaron S. Edlin & Stefan Reichelstein, Holdups, Standard Breach Remedies, and Optimal Investment, 86 AM. ECON. REV. 478 (1996); Yeon-Koo Che & Donald B. Hausch, Cooperative Investments and the Value of Contracting, 89 AM. ECON. REV. 125 (1999).

^{20.} For a useful discussion of this aspect of rules that scrutinize victims' behavior, see Cooter, *supra* note 12, at 10–11.

^{21.} For an argument drawing on this analogy, see Richard A. Epstein, *Beyond Foreseeability: Consequential Damages in the Law of Contract*, 18 J. LEGAL STUD. 105, 118–20 (1989).

¹¹⁵⁴

Of course, there is no reason to suppose that 80% would always be the right number. If the remedy were instead reduced to (say) 40% of compensatory damages, meaning that victims had to bear 60% of their losses, that would give victims even stronger incentives to moderate their behavior. We could even go farther and reduce damages all the way to zero, so that victims had to bear *all* of their losses—and in that case, victims would have exactly the right incentive to moderate their own behavior. Under a zero-damages rule, victims' incentives would be efficient because the victims would have to internalize all of the costs (as well as all of the benefits) of any changes in their own behavior.

This analysis is complicated, though, by the fact that even victims who have the right *incentives* to moderate their behavior may not always have the *ability* to do so. In particular, if victims are not very well informed about the relevant risks, or about the precautions available to reduce those risks, they may not know enough to modify their behavior appropriately, even if they have every incentive to do so (that is, even if the victims would have to bear all the resulting losses). In many cases, if the wrongdoer has superior information about the relevant risks, it might make sense to shift the losses to victims only if the wrongdoer has disclosed that information.²²

2. Victims' Behavior and Other Relevant Incentives

More generally, even when a lower measure of damages is efficient in one respect (namely, in its effect on victims' incentives), it may not be efficient in others. For example, a zero-damages rule might not provide

^{22.} For these purposes, the disclosure of information can be viewed as an additional precaution that the wrongdoer should have taken, under the analysis to be discussed *infra* Part III.D. In other contexts, it may be useful to require victims to disclose information to the potential wrongdoer, so that the wrongdoer can adjust her own precautions appropriately. For an analysis of this latter possibility, see Lucian Ayre Bebchuk & Steven Shavell, *Information and the Scope of Liability for Breach of Contract: The Rule of* Hadley v. Baxendale, 7 J.L. ECON. & ORG. 284 (1991).

Of course, in either of these contexts, it may not be easy to figure out exactly what information should have been disclosed, or in what form it should have been disclosed. For discussions of this difficulty as it arises in products liability, see, for example, James A. Henderson, Jr. & Aaron D. Twerski, *Doctrinal Collapse in Products Liability: The Empty Shell of Failure to Warn*, 65 N.Y.U. L. REV. 265 (1990); Howard Latin, "Good" Warnings, Bad Products, and Cognitive Limitations, 41 UCLA L. REV. 1193 (1994). Some analogous issues in contract law are discussed briefly in Richard Craswell, *Property Rules and Liability Rules in Unconscionability and Related Doctrines*, 60 U. CHI. L. REV. 1, 53–57 (1993).

the most efficient level of insurance, under the analysis discussed in the preceding subsection. A lower measure of damages might also be inefficient in its effect on the *wrongdoer's* incentives, under the analysis to be discussed in Part III.D. As a consequence, lower measures of damages often will not represent the most efficient remedy overall, once all of the relevant effects are taken into account.

Indeed, this tradeoff among different dimensions of efficiency will reappear at several points in this survey, for it exemplifies a recurring theme of the recent economic analysis. That is, if instrumental analysis is concerned with behavior along more than one dimension, the remedy that is most efficient along all dimensions taken together will often be some intermediate value.

As a consequence, some of the recent economic work has explored the effects of a more fundamental change in damages rules. At present, in most fields of law, the entire sum that the wrongdoer pays in damages is awarded to the victim. It is, however, possible to imagine a regime in which the wrongdoer pays more than the victim receives, with the difference being given to some third party (or simply paid into the public treasury as a fine). Such a regime would, in effect, decouple the amount that the defendant pays from the amount that the plaintiff collects. But this decoupling could be quite desirable from an efficiency standpoint, by permitting the use of two damage awards rather than one. For example, the measure of damages that the wrongdoers' incentives to take precautions, while the measure of damages that the victim was allowed to collect could be set with an eye to optimizing the victim's own incentives (or to optimizing victims' insurance, as discussed in the preceding section).²³

Admittedly, decoupled damage regimes introduce administrative complexities of their own, including (for example) the need to police private settlements in which a defendant agrees to pay the plaintiff some amount *without* paying any additional sum to the public treasury. Still, the fact that decoupled regimes could (in theory) have desirable efficiency consequences underscores even further the fact that "compensation," as such, is not doing any of the work in economic analysis. What matters in the modern analysis is that defendants be made to pay, and that

^{23.} For economic analyses of "decoupled" damages, see, for example, Michael Spence, Consumer Misperceptions, Product Failure and Producer Liability, 44 REV. ECON. STUD. 561 (1977); A. Mitchell Polinsky & Yeon-Koo Che, Decoupling Liability: Optimal Incentives for Care and Litigation, 22 RAND J. ECON. 562 (1991); Marcel Kahan & Bruce Tuckman, Special Levies on Punitive Damages: Decoupling, Agency Problems, and Litigation Expenditures, 15 INT'L REV. L. & ECON. 175 (1995). As these latter two articles address, decoupled damage regimes might also have implications for the frequency and cost of litigation, as discussed infra Part III.F.



plaintiffs be allowed to receive, some amount (not necessarily the same one) that will produce the best overall consequences. Whether that amount also qualifies as compensatory is simply beside the point, as far as economic analysis is concerned.

C. Efficient Pricing and Levels of Activity

One particular form of precaution, which is often available to victims, consists of reducing their use of some product or service. That is, if a good or service carries some risk of harm, it is efficient to use that good or service only when the benefits from its use exceed the total costs, including the risk of any possible harms. In the torts literature, this method of reducing overall risks is often referred to as reducing the victim's "level of activity."²⁴

Now, if there is no contractual relationship between victim and wrongdoer—more specifically, if the victim does not pay the wrongdoer any *price* for participating in the activity—the analysis is essentially identical to that given in the preceding section.²⁵ That is, if victims are guaranteed full compensation for any loss, they will not have much incentive to reduce their participation in the activity, just as full compensation also reduces victims' incentives to take other kinds of precautions. By contrast, if victims are not fully compensated, they will then have more incentive to take their own steps to reduce the risk of harm, including (if appropriate) reducing their level of participation in the activity. In the extreme case, if victims are not awarded any damages at all, they would then be internalizing all the costs associated with their choices, so their incentives to engage in the activity would be optimal. However, victims might still need better information in order to respond optimally to these incentives; and in that case some disclosure requirement might be useful.²⁶

26. See supra note 22.



^{24.} Steven Shavell, Strict Liability Versus Negligence, 9 J. LEGAL STUD. 1, 2–3 (1980).

^{25.} The only significant difference is that it is usually believed to be more difficult to use a contributory negligence standard to police a victim's decisions regarding the level of activity than it is to use such a rule to police a victim's decisions about levels of care. Indeed, for purposes of this issue, the analytic distinction is not so much between "levels of activity" and "levels of care," as it is between those decisions that can adequately be policed using a negligence-type standard and those that cannot. *Id.* at 22–23.

1. Prices and Enterprise Liability

If, however, the victim must pay a price to the wrongdoer in order to engage in the activity, the analysis changes significantly. In that case, even fully compensatory remedies *could* give victims an incentive to choose the appropriate level of participation. After all, if the wrongdoer is fully liable for all losses generated by the activity, the wrongdoer's prices must (in the long run) rise high enough to cover those losses. Higher prices, in turn, should usually discourage victims' participation in the activity in question.

Indeed, in some cases higher prices could create exactly the right incentives for victims (insofar as their level of activity is concerned), by forcing victims to pay a price reflecting the full costs associated with that activity. Higher prices can have this effect even if victims are completely uninformed about the actual risks associated with the activity—instead, all that matters is that they be fully informed about the price they have to pay.²⁷ As a result, whenever higher prices are a good method of discouraging participation in some activity, full compensatory damages might seem to produce yet another desirable effect. In tort law, this effect has often been discussed under the heading of "enterprise liability."²⁸

2. Cross-Subsidization and Adverse Selection

However, more recent economic analysis has limited this simple conclusion. The analysis given above works fine when either (1) all users of the good or service are identical, or (2) (what is almost the same thing) sellers can charge each user a price that is precisely tailored to that user's expected losses. However, in many contexts users differ in the expected damages that a tort or a breach would inflict. For example, if a defective toaster causes a fire, the consequential damages will be greater for users with expensive homes and furnishings than they will be for users with modest, working class homes. And in many cases, the manufacturer of the toaster cannot easily charge different prices to

^{28.} For the origins of this argument, see George L. Priest, *The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law*, 14 J. LEGAL STUD. 461, 505–19 (1985). More recent discussions include, for example, Steven P. Croley & Jon D. Hanson, *Rescuing the Revolution: The Revived Case for Enterprise Liability*, 91 MICH. L. REV. 683, 693–94 (1993); James A. Henderson, Jr. & Jeffrey J. Rachlinski, *Product-Related Risk and Cognitive Biases: The Shortcomings of Enterprise Liability*, 6 ROGER WILLIAMS U. L. REV. 213 (2000); Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: A Response to Market Manipulation*, 6 ROGER WILLIAMS U. L. REV. 259 (2000).



^{27.} Shavell, *supra* note 24, at 14–16.

different customers, so as to make each customer's price reflect the total risks associated with his or her individual purchase.

If manufacturers must instead charge all customers the same price for a given product, fully compensatory damages may then produce some less desirable effects. If all customers pay the same price, the result will be a form of cross-subsidization. Those users who are at risk for suffering the greatest losses, such as those with expensive home furnishings, will get the product at a subsidy because the price they pay will not be enough to cover all the potential losses that *their* purchase entails. This subsidy will be paid for by users who have less at stake, and who therefore will receive less in damages if anything goes wrong, but who nevertheless have to pay the same price as the high-risk users do.

Obviously, in this scenario, a price that reflects full compensatory remedies will no longer make each potential victim internalize all the costs associated with that particular victim's product use. Instead, in this scenario compensatory remedies can be criticized for producing two less desirable effects. First, the direction of the subsidy may be undesirable from a fairness standpoint, if it allows relatively rich users to be subsidized by relatively poorer ones.²⁹ Second, from the standpoint of efficient activity levels, the subsidy could produce "adverse selection," meaning that riskier customers (those who benefit from the subsidy) will use the product excessively, while less risky customers (those who have to pay the subsidy) will use it too little.³⁰ In the extreme case, the less risky customers might even be priced out of the market entirely, leaving only the highest-risk customers to purchase the product.

To be sure, even if these effects occur, that need not imply that compensatory damages are *necessarily* bad. As we have already seen, compensatory damages can produce any number of distinct effects, and some of these effects might be good while others might not be. As a result, in any instrumental assessment of compensatory damages—or of any other damage remedy, for that matter—it will always be important to specify the precise instrumental effect that is being considered.

^{30.} Gwyn D. Quillen, Note, Contract Damages and Cross-Subsidization, 61 S. CAL. L. REV. 1125, 1131 (1988).



^{29.} This effect has been noted by critics on both the left and the right. See, e.g., Richard L. Abel, A Critique of American Tort Law, 8 BRIT. J.L. & SOC'Y 199, 202–06 (1981); George L. Priest, A Theory of the Consumer Product Warranty, 90 YALE L.J. 1297, 1350–51 (1981).

D. Efficient Precautions by Wrongdoers

Let us return now to the example of a manufacturer whose products pose a 10% risk of a defect, and a defect (if one occurs) inflicts a \$200 loss on users of the product. For now, let us suppose this \$200 loss is entirely pecuniary, to eliminate the complications discussed earlier in Part III.A; and let us also assume that there is nothing the victims can do to affect this risk. But suppose now that improvements in technology make it possible to reduce the defect rate by one percentage point, from 10% to 9%, by spending additional amounts on quality control. When will that additional expenditure be efficient? And what remedy will give the manufacturer an incentive to make that expenditure, if it is in fact efficient?

If users of the product are risk-neutral, this small reduction in the defect rate should be worth \$2 to them $(0.01 \times 200 = 2)$. In that case, damages equal to 200 will give the manufacturer an incentive to take an efficient level of precautions, just as in the early analyses discussed in Part II.C. That is, if the manufacturer has to pay \$200 every time a product turns out defective, then extra expenditures on quality control will save the manufacturer \$200 on liability on one out of every 100 products produced, for an average savings of \$2 per product. As \$2 also represents the benefit of improved quality control (to risk-neutral customers), the manufacturer's incentives will reflect both the benefits and the costs of quality control.

Moreover, even if users of the product are not risk-neutral, nothing changes in this analysis as long as the measure of damages fully compensates customers for *all* of their losses (\$200). After all, if the measure of damages is compensatory in this sense, then users of the product will not really be facing any risk. Either there will be no defect, in which case they will not suffer any loss; or there will be a defect but they will be fully compensated, in which case they still will not suffer any loss. As a result, users' attitudes toward risk will be irrelevant in this example. This means that the preceding paragraph's conclusion—that it is efficient to spend up to \$2 per product on improved quality control—can stand regardless of users' attitudes toward risk, *as long as damages are compensatory in this sense*.

However, complications arise when (a) users of the product are riskaverse, and (b) the legal measure of damages is for some reason less than fully compensatory. As we have already seen, there are several reasons (all having to do with other dimensions of efficiency) why legal remedies might properly be set at less than \$200 here. For example, smaller remedies might provide better levels of insurance against nonpecuniary losses; or they might improve the incentives of users of

the product, to the extent that users' behavior could influence the likely losses.³¹ In such a case, use of a smaller remedy could also alter the efficient level of precautions by the wrongdoer, as long as victims are risk-averse.

To see this, recall the numerical example I provided earlier, in which a reduction of the defect rate by one percentage point would be worth \$2 to users (0.01 x \$200 = \$2). If users are risk-neutral, this is exactly how they will evaluate *any* reduction of one percentage point. That is, to risk-neutral users, it will not matter whether the reduction is from 10% to 9%, or from 2% to 1%, or from 25% to 24%. In any of these cases, risk-neutral users (by definition) will evaluate that reduction solely in terms of its expected value, which will always work out to \$2.

If users are risk-averse, however, they will not evaluate these reductions solely in terms of their average or expected value. Instead, a risk-averse user might find a reduction from 25% to 24% to be worth somewhat more than a reduction from 10% to 9%, which may in turn be worth more than a reduction from 2% to 1%. Indeed, such differences in valuation should be expected under the standard assumption of declining marginal utility. In a nutshell, the user who faces a high risk of a defect (say, 25%) will have an expected level of wealth that is less than it would be if the user were instead facing a smaller risk of a defect (say, a risk of only 10%). As a consequence, the first user might place a greater value on any improvement in his expected level of wealth than would the second user. In practical terms, this means that risk-averse users might pay more to reduce the defect rate from 25% to 24%, than they would pay to reduce the defect rate from 10% to 9%.³²

As may already be apparent, this complicates the task of optimizing the manufacturer's incentives. Suppose, for concreteness, that users would pay \$3 per product to reduce the risk from 25% to 24%, but they would only pay \$2 per product to reduce the risk from 10% to 9%. We have already seen that, if our goal is to get the manufacturer to spend up to \$2 per product (but not to spend any more than that), damages set at

^{32.} For a formal model incorporating this effect, see Rea, *supra* note 17, at 37–45. Survey evidence that is consistent with this effect is reported in M.W. Jones-Lee et al., *The Value of Safety: Results of a National Sample Survey*, 95 ECON. J. 49 (1985). For more nuanced survey evidence, suggesting a more complex picture, see V. Kerry Smith & William H. Desvousges, *An Empirical Analysis of the Economic Value of Risk Changes*, 95 J. POL. ECON. 89 (1987).



^{31.} Subcompensatory remedies might also be desirable because of the effects of imperfect enforcement. I discuss these effects *infra* Part III.E.

\$200 will achieve this goal. But if, instead, our goal is to get the manufacturer to spend up to \$3 per product (and no more), damages should then be set at \$300 for every defect. That is, if damages are set at \$300 per defect, then every reduction in the defect rate of one percentage point will reduce the manufacturer's expected liability costs by exactly \$3 (0.01 x 300 = 33). Thus, insofar as the effect on the manufacturer's precautions are concerned, the efficient damage measure will be \$300 if we are considering precautions that reduce the defect rate from 25% to 24%. But the efficient damage measure falls to \$200 if we are considering precautions that instead would reduce the defect rate from 10% to 9%, because users would only be willing to pay \$2 rather than \$3 for that reduction.

Once this is seen, the main point can be stated in ordinary English without using numbers. Insofar as we are concerned with the wrongdoer's incentive to take precautions, the efficient level of damages cannot necessarily be derived from the value that victims place on the entire loss they would suffer, as if they were being asked to accept that loss with certainty. Instead, the efficient level of damages should be determined by first finding the value that victims place on the specific reduction in risk that is under consideration—since this is all the difference those precautions will actually *make* to the victims—and then working backwards from that value to come up with the damage measure that gives the manufacturer the correct incentives.

In other words, the relevant economic question is not, "What is the value of a life?" Instead, the relevant question is, "What is the value of a particular 1% reduction in the risk of losing one's life?" To be sure, when victims are risk-neutral (as the earlier models assumed), each of these questions should yield identical answers. But when victims are risk-averse, and when they are not going to be *fully* compensated by the legal system, the answers to the two questions will no longer coincide. In that case, the most efficient measure of damages could be either higher or lower than the level that might otherwise be deemed compensatory.

E. Efficient Precontractual Investigation

In contract law, one particular set of precautions (for which a different analysis is required) consists of steps that must be taken before any contract has been formed. For example, we may want to give contracting parties an incentive not to misrepresent the quality of their products to prospective customers, or we may want incentives for parties to think carefully about a proposed contract before they sign. To be sure, some precontractual behavior can be addressed directly without involving

breach of contract, as when misleading statements are punished in their own right under the law of fraud. In many cases, though, the only sanction against inefficient precontractual behavior comes in the form of damages for breach, when the contract that was unwisely entered ends up broken. In these cases, the selection of the remedy for breach may well have an effect on the incentives for precontractual behavior, so a full instrumental analysis must consider these effects as well.

1. Investigation of Potential Risks

Consider, for example, a construction contract that turns out to be too costly for the builder to perform, but whose full costs could have been anticipated in advance if the builder had inspected the job site more carefully. In other words, suppose that if the builder had made a more careful inspection, this contract would never have been signed.

In such a case, the buyer cannot claim that the builder's failure to inspect deprived him of the benefits he would have gotten from performance, for the buyer would not have gotten those benefits even if the builder had inspected (because if the builder had inspected, she would never have signed the contract). However, the buyer may well be able to claim that, if the builder had made a more careful inspection, the buyer would have been able to save any money he spent in reliance on the builder's promise that she would do the job. Indeed, some analysts have suggested that the proper remedy in such case should be the buyer's reliance damages, as these are the only losses that were truly *caused* (in a but-for sense of causation) by the builder's inadequate inspection.³³

However, the full effects of damage remedies on the builder's incentives are somewhat more complex. When reliance damages are equal to expectation damages, as is often the case in perfectly competitive markets, the conclusion as stated is sound: Optimal incentives to investigate can be created by making anyone who breaches pay the other party's reliance damages. But if reliance damages are equal to expectation damages, it is just as true to say that efficient incentives could be created by making anyone who breaches pay the other party's expectation damages. The interesting cases, for purposes of this issue, are those in which reliance damages do *not* equal expectation damages. These are

^{33.} E.g., Christopher T. Wonnell, *Expectation, Reliance, and the Two Contractual Wrongs*, 38 SAN DIEGO L. REV. 53, 77 (2001).

the cases in which the full economic analysis is more complex.

Specifically, if the nonbreacher's expectation damages exceed his reliance damages, this means that the breaching party (the builder in the above example) has not been able to capture all of the surplus from the proposed exchange. As a consequence, the builder's incentives may be distorted in two different ways. First, the builder may fail to account for the fact that her inadequate investigation could lead the buyer into wasted reliance expenditures (just as the preceding analysis suggested). In addition, though, the builder may also fail to account for the surplus that the buyer would lose if, under threat of having to pay damages, the builder grows too conservative and declines to enter into some contracts that could profitably have been performed.³⁴ A truly efficient damage measure would avoid distorting the builder's incentives in either of these ways, and this will normally require a measure that exceeds the buyer's reliance losses. However, the optimal damage measure (in terms of its effect on the incentives to investigate) could be either above or below expectation damages, with the exact measure depending on the exact costs and benefits of further investigation.³⁵

2. Search for Contracting Partners

The analysis becomes even more complex if we consider the incentives governing another form of precontractual investigation, this time involving the search for potential contracting partners. For example, if I have a widget I want to sell, I might sign a contract to sell it to the first buyer I find, or I might instead wait a bit longer to see if I can find someone who will pay an even higher price. If I sign with the first buyer who appears, I save myself the costs of further search, but I also run the risk that I will later want to breach the contract (if another buyer arrives and offers to pay more for the widget). In this respect, the additional search for contractual partners represents another form of precontractual precaution, to reduce the risk of entering into a contract that (in hindsight, at least) should not have been entered into.

In this case, too, some of the complications arise from a kind of externality. That is, if I decide to spend extra time searching for a better deal, I will capture some of the benefits of that search myself, assuming

^{35.} *Id.* at 421-25. More precisely, if the buyer knows the exact probability that the builder will be able to perform, then the actual risks can be reflected in the price the parties agree to, and *any* damage measure will give the builder optimal incentives to investigate. If, instead, the buyer is not accurately informed about the relevant probabilities, only a damage measure in excess of the reliance measure will optimize the builder's incentives to investigate.



^{34.} For a formal model of these two effects, see Richard Craswell, *Precontractual Investigation as an Optimal Precaution Problem*, 17 J. LEGAL STUD. 401 (1988).

my search is successful. However, I will not necessarily capture *all* of the benefits from further search, because some of those benefits will likely be gained by the buyer that I eventually sell my widget to (assuming, again, that my search is successful).³⁶ As a result of this latter effect, damages equal to the other party's expectation interest may provide too little incentive for additional search. But here, too, it is difficult to say whether the optimal measure of damages would be either higher or lower than the expectation measure, for this may depend on the exact structure of the costs and potential returns to search.³⁷

3. Other Information Gathering

More generally, there are many other forms of information gathering that might also be affected by legal remedies. For instance, if one party goes to some trouble to learn that a war has ended, or to learn that there are valuable minerals under a farmer's land, should the law require that party to disclose her information (for free) to anyone she later deals with? As Anthony Kronman first emphasized, the answer to that question could significantly affect a party's incentive to gather the information in the first place.³⁸ Along the same lines, Victor Goldberg

^{36.} More precisely, the searching party will capture all of the benefits only if she can sign a contract that extracts the entire surplus from any trading partner she discovers through additional search. For formal models analyzing these incentives, see Peter A. Diamond & Eric Maskin, *An Equilibrium Analysis of Search and Breach of Contract, I: Steady States,* 10 BELL J. ECON. 282 (1979) [hereinafter Diamond & Maskin I]; P.A. Diamond & Eric Maskin, *An Equilibrium Analysis of Search and Breach of Contract II. A Non-Steady State Example,* 25 J. ECON. THEORY 165 (1981). Some of the same features are present in Dale T. Mortensen, *Property Rights and Efficiency in Mating, Racing, and Related Games,* 72 AM. ECON. REV. 968, 973–75 (1982).

^{37.} Diamond & Maskin I, *supra* note 36, at 288–300. One complication stems from the fact that the optimal searching strategy for any one individual may depend on the searching strategy that other individuals follow, thus giving rise to multiple equilibria. Still another complication, which Diamond and Maskin also take into account, rests on the fact that higher or lower measures of damages may also distort a party's incentives when she is deciding to perform or breach a contract that she has already signed (as discussed earlier in connection with the theory of efficient breach).

^{38.} Anthony T. Kronman, Mistake, Disclosure, Information, and the Law of Contracts, 7 J. LEGAL STUD. 1 (1978). For a more formal economic analysis of this issue, see Steven Shavell, Acquisition and Disclosure of Information Prior to Sale, 25 RAND J. ECON. 20 (1994). Other, less formal discussions include Randy E. Barnett, Rational Bargaining Theory and Contract: Default Rules, Hypothetical Consent, the Duty to Disclose, and Fraud, 15 HARV. J.L. & PUB. POL'Y 783 (1992); Andrew Kull, Unilateral Mistake: The Baseball Card Case, 70 WASH. U. L.Q. 57 (1992); Christopher T. Wonnell, The Structure of a General Theory of Nondisclosure, 41 CASE W. RES. L. REV. 329 (1991). Analyses of the same issue from the standpoint of moral theory

has pointed out that the enforcement of fixed-price contracts can have a similar impact on parties' incentives to invest time and money trying to forecast future price movements.³⁹

These problems, too, contain the key feature that the private incentives to gather information may not be the same as the social incentives.⁴⁰ In many cases, information has social value because it allows people to alter their plans accordingly. For example, if a war has in fact come to an end, it may now be worth planting crops again; while if there are valuable minerals under a plot of land, it may not be worth planting crops on it. In each case, though, the information in question may also have private value, if it allows someone who knows the information to buy (or sell) the asset before its price changes. In general, there is no reason why the social and private values should necessarily coincide, and therefore no reason why the private incentives to gather information will be optimal.⁴¹

Admittedly, the implications of this issue for *damage* remedies may not be immediately apparent. In much of contract law, and certainly in Anthony Kronman's classic article, the question of interest is whether a seller should be allowed to *rescind* a contract if the buyer failed to disclose important information about the asset's value.⁴² If the seller is allowed to rescind, the asset would then be returned to the seller—or, equivalently, if the asset has not yet been delivered, the seller would be allowed to refuse to deliver it. In either case, the seller would then be free either to keep the asset, or to sell it on the market for its now higher market value. The result, of course, is that the increase in value would then be captured by the seller rather than the buyer.

41. In particular, the extent of any divergence between private and social gains from gathering information will usually depend critically on how the gains from betterinformed decisions are divided between the contracting parties. *See, e.g.*, Shavell, *supra* note 38, at 23 (assuming that sellers can capture all of the gains by making "take it or leave it" offers); Diamond & Maskin I, *supra* note 36, at 286 (assuming an equal division of any surplus); Craswell, *supra* note 11, at 632–33 (assuming that the surplus is divided according to some fixed proportion).

The expected division of any surplus is also a key parameter in assessing the effect of damage measures on the victim's incentives to moderate his own behavior in reliance on a contract, as discussed in the text accompanying *supra* note 19.

42. Kronman, supra note 38.

include KIM LANE SCHEPPELE, LEGAL SECRETS: EQUALITY AND EFFICIENCY IN THE COMMON LAW 111–26, 161–78 (1988); Alan Strudler, *Moral Complexity in the Law of Nondisclosure*, 45 UCLA L. REV. 337 (1997).

^{39.} Victor P. Goldberg, *Note on Price Information and Enforcement of the Expectation Interest, in* READINGS IN THE ECONOMICS OF CONTRACT LAW 80–83 (Victor P. Goldberg ed., 1989).

^{40.} This is a feature emphasized by Shavell, *supra* note 38, at 22. For a less technical discussion of this aspect of the problem, see ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS 258–61 (1988).

Still, rescinding a contract (or excusing the seller from performing) is simply an extreme form of a *less* than compensatory remedy, for rescission denies the buyer any compensation for the seller's failure to deliver. Whenever Kronman's argument is correct, then, it supplies an instrumental case for remedies that are less than fully compensatory. To be sure, a corrective justice theorist might prefer to describe this as a case in which no wrong has been done (if the grant of rescission was proper), so no compensation is even required. From an instrumental standpoint, however, there is no difference between saying "no wrong has been done" and saying "a wrong may have been done, but the most efficient remedy is zero damages." And in more nuanced models than Kronman's, in which the optimal remedy is not zero (but may still be less than fully compensatory), saying that "no wrong has been committed" would lead to too *low* a remedy, at least if the absence of any "wrong" is taken to require no remedy at all.

F. Efficient Enforcement

Yet another dimension of efficiency concerns the resources devoted to enforcing legal rights and remedies. Perhaps in an ideal world of corrective justice, it would be the case that every wrong was instantly detected and every wrongdoer made to pay compensation. In the real world, however, there is no way to attain this goal, at least not at any practicable cost. As a result, recent economic analyses have devoted a good deal of attention to issues of optimal enforcement.

1. The Chance of Escaping Punishment

For example, suppose that a particular wrong causes \$200 of injury to its victims, and let us suppose for now that a \$200 damage measure would create the right incentives for wrongdoers to avoid such losses. (In other words, to better focus in on issues involving enforcement costs, I shall ignore all of the complications discussed in the preceding three sections.) To focus on enforcement issues, suppose that only 50% of those who commit these wrongs are ever sued and made to pay damages.

In that case, it probably will not be efficient to charge those wrongdoers with exactly \$200 in damages. After all, if the wrongdoers know in advance that there is only a 50% chance that they will ever have to pay, then the deterrent effect of having to pay \$200 (if and when they are caught) will be significantly diluted. Instead, the threat of having to

pay \$200 in damages will have an expected value of something closer to \$100, once the 50% chance of escaping payment entirely is taken into account.

Perhaps the most familiar solution to this problem requires that compensatory damages be multiplied by one over the probability that any given wrongdoer will be brought to justice. Thus, if wrongdoers' incentives could be optimized by threatening them with an expected cost equal to compensatory damages, or \$200, it might make sense to increase to \$400 the damages collected from those wrongdoers who actually get sued. Under such a rule, all wrongdoers would face a 50% chance of having to pay \$400 in damages, which works out to an expected cost of \$200 (0.50 x \$400 = \$200). Indeed, this method of adjusting for enforcement uncertainty has been known since 1800 or earlier.⁴³ As a result, this solution (which I will call the "multiplier principle") figures prominently in many economic analyses.

Later analyses, however, have recognized that the multiplier principle may create inefficient incentives unless the multiplier is figured individually for each wrongdoer, based on that particular person's probability of escaping punishment. Obviously, if the multiplier must be figured individually in each case, this will add to the administrative costs of the system. Less obviously, perhaps, the requirement that multipliers be calculated on an individual basis can also lead to odd results-odd from a corrective justice standpoint, that is, if not from the standpoint of economics. For example, this solution may require that wrongdoers who commit the most egregious violations receive the smallest multipliers, if those are the wrongdoers whose violations are the most likely to be detected and punished. By contrast, the *largest* multipliers (under this solution) would be assigned to wrongdoers who commit the smallest and most marginal violations—including violations whose illegality was not even clearly established-if these are the wrongdoers who are the least likely to be sued, and therefore the most likely to escape having to pay.⁴⁴

As a result, recent economic analyses have also considered the use of multipliers that are the same for all defendants, rather than being figured separately on a case-by-case basis. Interestingly, if a constant multiplier is used, the most efficient multiplier will generally be *less* than the

^{44.} For further discussion of this point, see Richard Craswell, *Deterrence and Damages: The Multiplier Principle and Its Alternatives*, 97 MICH. L. REV. 2185, 2191–93 (1999). Earlier models avoided this effect by restrictively assuming that the probability of having to pay damages was identical for all wrongdoers, regardless of the nature of their behavior.



^{43.} See JEREMY BENTHAM, THEORY OF LEGISLATION 325–26 (R. Hildreth trans., Trubner & Co. 1864) (1802). In the modern economic literature, the multiplier principle owes its prominence to Gary S. Becker, *Crime and Punishment: An Economic Approach*, 76 J. POL. ECON. 169 (1968).

traditional multiplier would suggest, meaning that it will be less than one over the probability of punishment faced by the average wrongdoer. In some cases, the optimal multiplier could even be less than one, meaning that damages should be *reduced* (rather than augmented) in order to create efficient incentives in the presence of imperfect enforcement.⁴⁵ If so, that could provide yet another reason why the most efficient remedy might be less than fully compensatory—another reason, that is, over and above the reasons discussed earlier involving efficient insurance against nonpecuniary losses (Part III.A), or efficient incentives for victims to adjust their own behavior (Parts III.B and III.C).

Unfortunately (but perhaps realistically), these analyses also suggest that the exact size of the efficient multiplier will depend on a number of factors that are likely to be hard to measure. For example, in these analyses the optimal multiplier is influenced by the rate at which the probability of paying damages *changes*, as wrongdoers' behavior grows more or less egregious. This is likely to be more difficult than estimating the actual probability faced by any particular wrongdoer, as required by the traditional case-by-case multiplier principle.⁴⁶

2. Optimizing on Enforcement Expenditures

In addition, further complications arise when we consider that the measure of damages may itself affect the probability of having to pay, if a higher measure of damages increases the number of victims who find it worth their while to file suit. This effect would not matter (or not in the same way) in a system of purely public enforcement, for in that case the state could decide for itself how many prosecutions were worth bringing.⁴⁷ In any system of private enforcement, however—including the common law systems of contract, tort, and property—it is left to private plaintiffs to decide whether or when to bring suit. Inevitably, the measure of damages the law makes available will affect each plaintiff's decision.

Once this effect is considered, the efficient damages could be either

^{47.} For analyses of the optimal level of public enforcement expenditures, see, for example, A. Mitchell Polinsky & Steven Shavell, *The Optimal Tradeoff Between the Probability and Magnitude of Fines*, 69 AM. ECON. REV. 880 (1979) [hereinafter Polinsky & Shavell, *Optimal Tradeoff*]; A. Mitchell Polinsky & Steven Shavell, *The Optimal Use of Fines and Imprisonment*, 24 J. PUB. ECON. 89 (1984); Steven Shavell, *Specific Versus General Enforcement of Law*, 99 J. POL. ECON. 1088 (1991).



^{45.} Id. at 2198-2205.

^{46.} For further discussion of these and other differences, see *id*. at 2223–36.

higher or lower (higher or lower, that is, than whatever measure of damages would otherwise be most efficient). On the one hand, any reduction in the measure of damages could reduce the number of lawsuits that were filed, thereby reducing total litigation expenditures. On the other hand, a reduced measure of damages could also reduce the deterrent effect on wrongdoers' behavior, both directly (because wrongdoers would not have to pay as much if convicted) and indirectly (because fewer plaintiffs would find it worthwhile to sue). If this reduced deterrent effect led to an increase in the total number of wrongs committed, that could increase the *total* amount spent on litigation, even while the probability of any particular wrong being litigated had declined.⁴⁸

Indeed, similar adjustments may be required (with similarly ambiguous effects on total welfare) if collecting higher damage awards is more expensive for any other reason. For example, if courts or juries require a higher burden of proof before they will impose higher damage awards, that could increase the cost of gathering evidence and of litigating.⁴⁹ Higher damage awards might also be more costly to collect, if the threat of higher damage awards leads wrongdoers to spend more on litigating to resist a finding of liability, or to resist collection of the higher awards by trying to conceal their assets.⁵⁰ Also, if potential wrongdoers are themselves risk-averse, increases in the damage award will increase their risk-bearing costs.⁵¹ As all of these effects increase the total social costs associated with higher damage awards, their net effect will often be to reduce the optimal level of damages. However, this effect too is subject to the ambiguity noted earlier-that is, if higher damage awards strengthen the law's deterrent effect by so much that far fewer violations are committed, it could be that *higher* awards would reduce the total costs associated with litigating and collecting damages.⁵²

In short, the analysis of efficient remedies is complicated enough even

^{48.} For a formal model of these effects, see A. Mitchell Polinsky & Daniel L. Rubinfeld, *The Welfare Implications of Costly Litigation for the Level of Liability*, 17 J. LEGAL STUD. 151 (1988). For a qualitatively similar analysis, see David Friedman, *An Economic Explanation of Punitive Damages*, 40 ALA. L. REV. 1125, 1133–34 (1989).

^{49.} For formal models of various aspects of this issue, see, for example, James Andreoni, *Reasonable Doubt and the Optimal Magnitude of Fines: Should the Penalty Fit the Crime?*, 22 RAND J. ECON. 385 (1991); Louis Kaplow & Steven Shavell, *Accuracy in the Determination of Liability*, 37 J.L. & ECON. 1, 13–14 (1994); Daniel L. Rubinfeld & David E.M. Sappington, *Efficient Awards and Standards of Proof in Judicial Proceedings*, 18 RAND J. ECON. 308 (1987).

^{50.} Richard A. Posner, *An Economic Theory of the Criminal Law*, 85 COLUM. L. REV. 1193, 1207 (1985). For a formal model of these costs, see Arun S. Malik, *Avoidance, Screening and Optimum Enforcement*, 21 RAND J. ECON. 341 (1990).

^{51.} Polinsky & Shavell, Optimal Tradeoff, supra note 47, at 884–86; Louis Kaplow, The Optimal Probability and Magnitude of Fines for Acts that Definitely Are Undesirable, 12 INT'L REV. L. & ECON. 3 (1992).

^{52.} See supra note 48 and accompanying text.

¹¹⁷⁰

if we consider only two sets of consequences: (a) the deterrent effect on wrongdoers, together with (b) the effect on total enforcement costs. That is, even if we limit our attention to these two effects alone, the most efficient measure of damages could be either higher or lower than an exactly compensatory measure. Moreover, any full-scale instrumental analysis cannot stop with these two effects, but must also consider the other effects discussed earlier in this paper. For example, a full analysis would also have to consider (c) any deterrent effects on victims' own behavior, as well as (d) the level of insurance each remedy provides. As I observed at the outset, this complicates matters considerably.

G. Efficient Breach and Efficient Takings

Finally, let me now return to the example with which I began this survey, involving a deliberate (or nonprobabilistic) breach of contract, or a deliberate (or nonprobabilistic) taking of the victim's property. As long as the breach or the taking is certain, rather than merely being probabilistic, we no longer need to worry about the dimension of efficiency involving precautions to reduce the *likelihood* of harm. Instead, in this example we have to worry about the incentives that govern the deliberate choice between breaking and performing a contract, or between taking another's property and leaving it alone. For simplicity, I will focus hereafter on the incentives to breach or perform, though a very similar analysis would apply to the incentives to take or not to take.

As we saw in Part II.A, the earliest economic analyses concluded that efficient incentives to perform or breach could be created by making every breacher pay full compensatory damages, no more and no less. However, even the earliest analyses recognized that compensatory damage measures represented just *one* possible way that the incentive to breach might be optimized. Compensatory damage measures could optimize the incentive to breach by means of a "liability rule," but it might also be possible to optimize those incentives by means of a "property rule," which required the would-be breacher to buy the other party's permission before she would be released from her contract. Under a property rule, of course, damages for failing to secure the other party's permission need not be set at an exactly compensatory level. Instead, damages under a property rule could be raised to an even higher level—in theory, they could be raised to infinity—in order to strictly deter the wrongdoer from breaching without the other party's consent.

1. Property Rules Versus Liability Rules

From this starting point, more recent analyses have complicated the analysis in several ways. First, there has been a good deal of analysis devoted to determining just when liability rules are likely to create better incentives than property rules, or vice versa. The early article by Calabresi and Melamed⁵³ suggested that (a) liability rules were better than property rules whenever transaction costs were high, but that (b) property rules dominated liability rules whenever transaction costs were low, because if transaction costs were low there would then be no barrier preventing one party to negotiate to get the other's permission to breach. However, both of these conclusions have been called into question by more recent work.

For example, if transaction costs are low, it should indeed be easy for the parties to negotiate around an inefficient assignment of property rights, and this could increase the attractiveness of property rules (just as Calabresi and Melamed noted).⁵⁴ However, if transaction costs are low, it should be equally easy for the parties to negotiate around an inefficient liability rule. As a consequence, low transaction costs do not by themselves give us any reason to favor property rules over liability rules (or vice versa). Instead, more recent analyses of this issue suggest that the choice between property rules and liability rules, if transaction costs are low, should instead depend on such factors as the likelihood and effects of judicial errors, either in estimating damages under a liability rule, or in assigning the initial entitlement under a property rule. The choice might also depend on the potential for practical problems such as multiple takings (A takes from B, then C takes from B, then D takes from C) or reciprocal takings (A takes from B, then B takes from A, then A) takes back again from *B*).

Indeed, the recent literature on this topic is now so extensive that it deserves a survey of its own, in more detail than this paper can provide.⁵⁵ For present purposes, I will merely note that whenever the

^{55.} That recent literature includes, among many others, James E. Krier & Stewart J. Schwab, *Property Rules and Liability Rules: The Cathedral in Another Light*, 70 N.Y.U. L. REV. 440 (1995); Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 YALE L.J. 1027 (1995); Louis Kaplow & Steven Shavell, *Property Rules Versus Liability Rules: An Economic Analysis*, 109 HARV. L. REV. 713 (1996); Richard R.W. Brooks, *The Relative Burden of Determining Property Rules and Liability Rules: Broken Elevators in the Cathedral*, 97 Nw. U. L. REV. 267 (2002); Ronen Avraham, *Modular Liability Rules* (Univ. of Mich., Working Paper No. 01-003, 2001), *available at* http://www.law.umich.edu/centersand programs/olin/abstracts/discussionpapers/2001/avraham-03.pdf (last visited Aug. 23, 2003); Ian Ayres & Paul M. Goldbart, *Correlated Values in the Theory of Property and Liability*



^{53.} Calabresi & Melamed, supra note 8.

^{54.} *Id.* at 1106–09.

law uses property rules, the resulting damages for violation of those rules will not even be intended to be compensatory. Instead, damages in a regime of property rules are designed for deterrence rather than for compensation: They are designed to deter the wrongdoer from taking someone else's property without first securing the property holder's consent. As a result, damages for violations of property rules can and should be set high enough to strictly deter such unconsented takings.⁵⁶ In this respect, any argument in favor of property rules is also an argument against compensatory damages.

2. Property Rules and Penalty Defaults

For similar reasons, I will only briefly allude to a set of arguments that might justify noncompensatory remedies in contract law, when those remedies are a form of "penalty default rule." A default rule, of course, is a rule (including a remedial rule) that contracting parties are allowed to alter by specifying some other rule in their contract. And a "penalty default," as that term has come to be used, is simply a default rule that most parties are likely to *want* to alter.⁵⁷ For example, a rule that provided for no remedies at all in the event of breach—no remedies, that is, except for whatever remedy the parties explicitly agreed to in their contract—would be a penalty default rule, as long as most parties would not want a relationship in which there were no damages at all should motivate most parties to provide for some other remedy in their contract.

Though the parallel has not often been discussed, penalty default rules have a good deal in common with property rules. That is, penalty defaults (like property rules) are designed to encourage the parties to negotiate explicitly with one another, and thus to choose their own

^{57.} The term is due to Ian Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 YALE L.J. 87, 91 (1989).



Rules, 32 J. LEGAL STUD. 121 (2003).

^{56.} Several aspects of this distinction—between damages intended to compensate and damages intended to deter—are usefully discussed in Robert Cooter, *Prices and Sanctions*, 84 COLUM. L. REV. 1523 (1984). Though Cooter does not explicitly draw this analogy, damages used to enforce liability rules correspond to what he labels "prices," while damages used to enforce property rules correspond to what he calls "sanctions." A similar distinction is also discussed in Keith N. Hylton, *Punitive Damages and the Economic Theory of Penalties*, 87 GEO. L.J. 421, 423 (1998).

allocation of rights and duties.⁵⁸ As a result, a court employing a penalty default need not decide on its own what allocation of rights and duties (or what remedies) would in fact be most appropriate. Instead, the court need only pick a term that is sufficiently *unattractive* (to one or both parties) so as to induce those parties to negotiate explicitly.

Indeed, even before the term "penalty default" was coined, scholars had suggested that noncompensatory remedies in certain contract cases might be justified on precisely this ground. For instance, Victor Goldberg has argued that consumers who break their contracts with retailers should not be liable for the full profits those retailers lose, unless the retailers had explicitly stipulated that amount up front in their sales contracts.⁵⁹ Similarly, Timothy Muris has suggested that, even when damages might otherwise be limited to exclude certain elements of subjective value, no such exclusion should be allowed (at least in certain consumer contracts) unless the limitation was explicitly provided for in the contract itself.⁶⁰ In each case, the argument is that the *default* remedy—not the remedy that will necessarily be collected, but the default rule that serves as a starting point for negotiations—should deliberately be set at a level that is not compensatory.

In short, arguments in favor of "penalty defaults" can also be invoked to support noncompensatory remedies, just as arguments in favor of property rules can be. However, the arguments in favor of penalty defaults implicate many other issues concerning the optimal choice of default rules, and those issues, too, deserve a survey of their own.⁶¹ For purposes of this survey, I merely note the possibility that noncompensatory damage rules might be defended as a more desirable *starting point* for negotiations, before turning back to arguments about whether compensatory damages are the ones it would be most efficient to actually collect. In other words, in the remainder of this section I will focus on the choice of damage rules (for deliberate or nonprobabilistic takings or breaches) once the law has decided to employ liability rules rather than property rules—or, in contract law, once the law has decided to adopt a "majoritarian" rather than a "penalty" default rule.⁶²

^{58.} I discuss these similarities briefly in Craswell, *supra* note 22, at 12–14.

^{59.} Victor P. Goldberg, An Economic Analysis of the Lost-Volume Retail Seller, 57 S. CAL. L. REV. 283, 294–97 (1984).

^{60.} Muris, *supra* note 5, at 390.

^{61.} See, e.g., Symposium on Default Rules and Contractual Consent, 3 S. CAL. INTERDISC. L.J. 1 (1993).

^{62.} The term "majoritarian default rule" was also coined by Ayres & Gertner, *supra* note 57, at 93.

3. Efficient Damages Under Liability Rules

The choice of damages under a liability rule is trivial if the court and both parties always know the exact loss that a breach or taking would inflict on the victim. In that case, damages equal to the victim's entire loss will create exactly the right incentives for the potential breacher, just as in the earliest analyses discussed in Part II.A. But what if the potential breacher or the court do not know the exact loss that a breach would inflict?

If the court cannot observe actual damages in every case, one solution is to set the measure of damages at the average loss that most victims would suffer.⁶³ This approach would yield remedies that might be called "compensatory" on average, even if they were not compensatory in each individual case. But recent work suggests that the incentives for efficient breach (or efficient takings) might be even better if remedies were set deliberately above that level, to take advantage of the private information that is implicitly revealed by the breacher's decision to commit a breach.⁶⁴ In effect, this approach treats the breacher's "right" to breach and pay damages (under a liability rule) as being similar to a financial option, in that it can be exercised or not at the breacher's choice.⁶⁵ Thus, in any case where the breacher has chosen to exercise that option—and it is only in these cases that damages will ever be at issue—the very fact of the breacher's decision may reveal something about the value of the option, thus permitting a more finely-tuned measure of damages.

4. The Effect on Other Incentives

Finally, the analysis of nonprobabilistic or "deliberate" breach has also been complicated in still another way by recent analyses. The complication here stems from the fact that whatever damage measure optimizes the incentives to breach or to take may not be the measure that optimizes any of the other incentives that we care about.

This issue, too, was absent in most of the earliest analyses. For

^{63.} Kaplow & Shavell, *supra* note 55, at 725–32.

^{64.} See, e.g., Avraham, supra note 55; Ian Ayres & Paul M. Goldbart, Optimal Delegation and Decoupling in the Design of Liability Rules, 100 MICH. L. REV. 1 (2001).

^{65.} See, e.g., Ian Ayres & J.M. Balkin, Legal Entitlements as Auctions: Property Rules, Liability Rules, and Beyond, 106 YALE L.J. 703, 729–33 (1996); Ian Ayres, Protecting Property with Puts, 32 VAL. U. L. REV. 793 (1998). For earlier analyses that also noted the similarity between damage rules and options, see Madeline Morris, The Structure of Entitlements, 78 CORNELL L. REV. 822, 854–56 (1993); Paul G. Mahoney, Contract Remedies and Options Pricing, 24 J. LEGAL STUD. 139 (1995).

example, in the earliest "efficient breach" articles, the sole aim of the analysis was to identify the rules that would lead to efficient choices between performing and breaking the contract, with no regard to the effect those rules might have on any other incentives. In effect, the early analyses proceeded as if the only question of any economic interest was whose hands the widget ought to end up in. Similarly, in Calabresi and Melamed's classic article on takings and nuisance law, their focus was almost entirely on creating incentives for efficient decisions between polluting and not polluting, or between taking and not taking. Lucian Bebchuk has recently described this as a focus on "ex post" incentives, meaning the incentives governing the final decision to take or not to take (or to breach or not to breach), with very little concern for any earlier or ex ante decisions whose incentives might also be affected.⁶⁶

To be sure, the economic analysis of contract remedies quickly proceeded beyond this original narrow focus. Thus, there is now a well-developed literature analyzing the effect of damage remedies on the parties' incentives to make investments in reliance on a contract, or to take precautions to reduce the likelihood of a breach, or to search more carefully for other parties with whom to contract, or to make any number of ex ante decisions whose incentives might also be relevant.⁶⁷ For some reason, the analysis of other incentives has not been as advanced in connection with property and nuisance law—though there are encouraging signs that this is beginning to change.⁶⁸

In the end, though, this point is merely another version of an observation that has been made throughout this survey. Once we focus carefully on the instrumental effects of legal remedies, it is obvious that there are many different effects that the law might care about, and the remedy that is best at achieving any one of these effects might not be best at achieving others. In the simple models of the 1970s, this trade-off often did not arise, for compensatory remedies often seemed to be best at achieving *all* of the effects with which those earlier models were concerned. But now that analysts have steadily expanded the range of effects that they consider, it has become impossible to ignore the fact that some effects may have to be traded off against others.⁶⁹

^{69.} For an interesting argument to the effect that these complexities have become so unmanageable that economic analysis has "failed" contract law, see Eric A. Posner, *Economic Analysis of Contract Law After Three Decades: Success or Failure?*, 112



^{66.} Lucian Arye Bebchuk, Property Rights and Liability Rules: The Ex Ante View of the Cathedral, 100 MICH. L. REV. 601 (2001).

^{67.} For an early survey, see Craswell, *supra* note 11.

^{68.} See, e.g., Bebchuk, supra note 66; Rohan Pitchford & Christopher M. Snyder, Coming to the Nuisance: An Economic Analysis from an Incomplete Contracts Perspective, 19 J.L. ECON. & ORG. (forthcoming Fall 2003), available at http://papers.ssrn.com/ sol3/papers.cfm?abstract_id=280842 (last visited Aug. 23, 2003).

IV. ECONOMICS CONTRASTED WITH CORRECTIVE JUSTICE

One purpose of this survey has been to demonstrate that economic analysis does not always support the use of compensatory damages. A deeper purpose, though, has been to show that the idea of compensation plays a very different role in economic theories than in theories of corrective justice. Specifically, while compensation is foundational to the very idea of corrective justice, compensation is only incidentally connected (if it is even connected at all) with economic welfare.

More specifically, theories of corrective justice take compensation as their remedial *aim* or *goal*. In order to carry out that goal, the theories must then answer two sorts of questions. First, they must decide which losses should be included in the set for which compensation is required. (For example, should we compensate for emotional distress? For lost opportunities? For the loss of future expectations?) Second, corrective justice theories require some method of assigning actual dollar values to each compensable loss. (For example, should we measure the dollar value of a loss by its market value? Or by the victim's subjective willingness to pay? Or by some other measure entirely?)

The other contributions to this symposium have illustrated the difficulties raised by the first set of questions (which losses should be compensated at all?). The answer to this question depends partly on an underlying theory of rights or entitlements, for presumably no compensation is owed if no entitlement was infringed. But even when each party's entitlements have been established, corrective justice limits compensable losses to those that were caused by somebody's wrongdoing. Obviously, this limit then requires a theory of what makes behavior wrongful. But it also requires a theory about when a loss is *caused* by someone's wrongful behavior, thus giving rise to all of the difficulties posed by concurrent causes or by moral luck. (For example, if I light a fire that would normally burn your house, what if someone else happens to burn your house first, before my fire can reach it?)⁷⁰

^{70.} For a discussion of these issues, see, for example, Michael Moore, For What Must We Pay? Causation and Counterfactual Baselines, 40 SAN DIEGO L. REV. 1181 (2003); Stephen Perry, Harm, History, and Counterfactuals, 40 SAN DIEGO L. REV. 1283 (2003); Richard W. Wright, The Grounds and Extent of Legal Responsibility, 40 SAN DIEGO L. REV. 1425 (2003).



YALE L.J. 829 (2003). For my own views, which are less pessimistic, see Richard Craswell, *In That Case, What Is the Question? Economics and the Demands of Contract Theory*, 112 YALE L.J. 903 (2003). Another response to Posner can be found in Ian Ayres, *Valuing Modern Contract Scholarship*, 112 YALE L.J. 881 (2003).

Moreover, even after we have determined which losses to compensate, corrective justice theories still need some way to measure that compensation in numerical dollar values. Unfortunately, questions of monetary valuation have rarely (if ever) been addressed by corrective justice theorists. For example, the loss of a house might be measured by the amount the owner would have been willing to pay to keep the house—but there is no obvious reason why corrective justice theories should *require* this measure of value. Still less is there any reason why corrective justice theories should require that a loss be measured by its market value, or by its assessment for purposes of property taxes, or (indeed) by any other particular numerical measure.

In the end, the difficulty is that the core concept of compensation, taken by itself, is not nearly thick enough to entail any answers to questions like these. The goal of compensation may tell us to restore the value of that which is lost, or something along those lines, but possible measures of "value" are a dime a dozen. And as long as compensation is taken as a brute *premise* of corrective justice, there is no further goal behind that premise to which we can look for a more specific answer.

How, then, do economic theories avoid this problem? The answer is that economic theories do not take compensation itself to be a premise or a goal. Instead, the goals of economic theories all concern particular *consequences* of awarding damages: consequences like deterring various forms of undesirable behavior, or providing optimal levels of insurance. In economic theories, therefore, questions about the exact measure of damages can all be recast not as questions about the definition of "compensation," but rather as questions about what measure will produce the best effects. In short, in economic theories the concept of compensation can be dispensed with entirely, whereas in corrective justice theories that concept is absolutely crucial.⁷¹

This same conclusion can be stated, in a slightly more radical form, by realizing that from the standpoint of an economic theory, any point on the real number line is potentially available as a measure of damages. To be sure, many of those available numbers will not correspond to anything that might be called compensation, in the sense that they will not match any standard measure of the value of any particular asset or entitlement. From the standpoint of economics, though, *it makes no difference* if the selected number does or does not match any standard measure of the value of any particular asset. If that number happens to provide a

^{71.} The concept of compensation *might* also be relevant—or it might not—to those who are concerned with the commodifying effects of monetary damages. For a useful discussion of this issue, which draws on some of the economic analysis surveyed here, see MARGARET JANE RADIN, CONTESTED COMMODITIES 184–205 (1996).



better mix of incentives and insurance (all things considered) than any other number that might be used, then that is the measure of damages that ought to be awarded—as long as we are still looking at things from the standpoint of economics. By contrast, though, if we look at matters from the standpoint of corrective justice, it apparently is crucial to pick a number that *does* correspond to some standard measure of value of some asset or entitlement. Only then can the resulting damage award plausibly be described as *compensating* for a particular loss.

In the contracts literature, this focus on the value of particular assets or entitlements can be seen in the influence of the classic article by Fuller and Perdue.⁷² Fuller and Perdue famously defined three entitlements or "interests" that might be lost when a contract is breached: (1) the *expectation* interest, or the value that the nonbreacher would have received from performance of the contract; (2) the *reliance* interest, or the value that the nonbreacher would have received if he or she had never agreed to the contract in the first place; and (3) the *restitution* interest, or that part of the reliance loss that the breaching party may have received as an extra benefit because of the breach. As a result, countless subsequent contract scholars have taken the key remedial question to be *which* of these three interests is most deserving of compensation.

As I have argued elsewhere, framing the issue in so narrow a way unduly limits the inquiry.⁷³ Yes, the three interests of Fuller and Perdue are three of the *possible* measures of damages that contract law might award. But so, too, are any number of other measures, including all the numbers produced by the various ways of assigning dollar values to each of these three interests, and also including the even larger range of numbers that may not correspond to the value of *any* particular interest. Once this is seen, the fascination with awards that happen to match the value of a particular interest—or, more precisely, with awards that happen to match some particular way of measuring in dollars the value of any particular interest—is extremely difficult to justify.⁷⁴ One might

^{74.} Significantly, this seems to have been Fuller's view as well. As Fuller later wrote, "I consider the contribution made in my article on the reliance interest to lie, not in calling attention to the reliance interest itself, but in an analysis which breaks down



^{72.} Fuller & Perdue I, supra note 2, at 53–54.

^{73.} Richard Craswell, *Against Fuller and Perdue*, 67 U. CHI. L. REV. 99 (2000) [hereinafter Craswell, *Against Fuller and Perdue*]; Richard Craswell, *How We Got This Way: Further Thoughts on Fuller and Perdue*, 1 ISSUES LEGAL SCHOLARSHIP Art. 2 (2001), *at* http://www.bepress.com/ils/iss1/art2 (last visited July 27, 2003).

almost as plausibly urge that contract law limit its damage awards to round numbers, so that it need only consider awards in exact multiples of \$10,000 or \$100,000.

To be sure, this problem may be particularly acute in contract law, where the entitlement that is injured by the breach is created by the contract, and thus is itself an issue of contractual and legal interpretation. As a consequence, selecting a contract remedy is part and parcel of defining the entitlement created by the contract, so it is difficult for corrective justice theories even to find a starting point.⁷⁵ By contrast, in tort law and property law, it *may* be easier to define the relevant entitlements according to some prior, independent theory of legal rights. If so—and I take no position on whether that "if" is warranted—then corrective justice theories may perhaps be better able to limit the permissible range of remedies in those fields of law.

In any event, it should by now be clear that the concept of compensation plays a very different role in corrective justice theories than it does in economics. Even when economists and corrective justice theorists agree about the outcome, and thus endorse the same measure of damages, they will do so for very different reasons. And when questions arise (as they inevitably will) about how that measure should be applied in any particular case, the economists and the corrective justice theorists will look to very different considerations to answer those questions.

the contract-no contract dichotomy, and substitutes *an ascending scale* of enforceability." Letter from Lon L. Fuller to Karl N. Llewellyn (Dec. 8, 1939), *reprinted in* ROBERT S. SUMMERS & ROBERT A. HILLMAN, CONTRACT AND RELATED OBLIGATION: THEORY, DOCTRINE, AND PRACTICE 41 (3d ed. 1997) (emphasis added).

^{75.} For further discussion of this point, see Craswell, Against Fuller and Perdue, supra note 73, at 121–28; Richard Craswell, Contract Law, Default Rules, and the Philosophy of Promising, 88 MICH. L. REV. 489, 503–11 (1989).

¹¹⁸⁰