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Breach Remedies

Aaron S. Edlin

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Aaron S. Edlin

Department of Economics, University of California, Berkeley

President's Council of Economic Advisers

National Bureau of Economic Research

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Contractual obligations provide commitment. By limiting opportunism, they promote valuable relation-specific effort and investment. The degree of commitment that a contract provides depends, naturally, on the penalty for breach.

This entry explores which breach remedies parties will want to combine with simple noncontingent contracts, and how the desirable remedy varies with circumstance. Such analysis may guide courts in setting default rules to be used when parties neglect to specify a remedy. In the course of this discussion, we will consider recent work that unsettles some long-standing conclusions of the law and economics literature.

We will focus on several standard breach remedies: expectation damages (a payment that makes the victim of breach as well off as performance would have); reliance damages (a payment that makes the victim as well off as if there had been no contract); and specific performance (court-compelled performance). Largely,

the entry follows the law and economics literature by considering these remedies in an abstract and idealized form. In the case of expectation damages, we will also explore how the typical formalization differs from common ways that the remedy is implemented.

We begin by considering efficient breach decisions under each of these remedies, and subsequently examine efficient reliance. Finally, we will argue that because the efficient remedy often depends on the circumstance, damage rules should not be immutable: courts should allow parties' freedom of contract in selecting their own breach remedy.

Efficient breach

We begin by asking which remedies encourage efficient breach: that is, which remedies provide a buyer or seller with incentives to perform only when performance turns out to be efficient. (For details, the reader may wish to consult Shavell 1980, Kornhauser 1986, Craswell 1988, or Posner 1992).

Fulfilling contractual obligations is not always efficient. Circumstances change between the time a contract is signed and the time when performance is due. A buyer may turn out not to need a good or service that he contracted to purchase. Similarly, a seller may find out that it is more costly to produce a good than she expected; her production cost could rise with the price of some input, or her opportunity cost might rise if another buyer wants the good or demands her time.

When parties have similar information and are able to renegotiate their agreements costlessly, breach occurs only when it is efficient. Below, we consider the polar case where renegotiation is impossible prior to the breach decision, perhaps because the buyer or the seller must make a quick decision about whether to take advantage of some short-lived opportunity and is unable to consult the other party to the contract. The following example will help explain why in simple breach decisions, expectation damages leads to efficient decisions, but reliance damages may not.

Example 1. Buyer commissions Craftsman to build him a customized desk for $1000. Subsequently, Buyer sees an antique desk at a garage sale and must decide

whether to buy this desk and repudiate his contract. At this point, Craftsman has spent $350 on materials and labour out of the $600 that would be required for the entire project.

Consider, first, the expectation damages remedy. Expectation damages are intended to give the victim of breach the benefit of her bargain. In example 1, this would require Buyer to pay Craftsman $750, which equals the contract price of $1000 less her avoided expenditures of $250. This damage measure gives Buyer efficient breach incentives. To see this, observe that finding the second desk at the garage sale lowers Buyer's willingness-to-pay (valuation) for the customized desk. (Note that willingness-to-pay is properly measured taking other opportunities into account.) Under the assumption that Buyer knows that damages will be $750, he will cancel his order if he decides that his value for the desk is less than $250 (the difference between the price he must pay upon delivery, $1000, and the damages he must pay for canceling, $750). Hence, Buyer would cancel the order in exactly the cases where doing so is efficient–the cases where his value is less than the remaining production cost of $250.

A general principle is at work here. Shavell (1980) and Kornhauser (1986) showed that breach would be efficient no matter what numbers we had chosen for cost and valuation in the example. In fact, Edlin (1996) has recently argued that under *certain conditions*, this efficient breach result extends to cases where breach is not a dichotomous 0-1 decision, as it was in the example above and in Kornhauser (1986). In particular, if Seller is paid in advance chooses from among a variety of different kinds of breach (substandard delivery), she will choose the most efficient action if damages are calculated to make the buyer as well off as perfect performance.

As long as one party can unilaterally choose the efficient action and pay the other damages that leave the other party with her expectancy interest, the first party is the residual claimant of joint surplus, and will choose the action (breach) that maximizes joint surplus. Consider the case where quantity, instead of being 0 or 1 as in example 1, is well-approximated by a continuous variable, as in Edlin

and Reichelstein (1996). Suppose, for instance, that United Airlines contracts to buy 100 airplanes from Boeing, each at $100 million. Later, United has an opportunity to buy 20 almost-new planes from a distressed airline at a price much lower than Boeing's production cost, and must seize the opportunity before it is possible to renegotiate its contract with Boeing. Once it buys the 20 planes, United may want to reduce its order from Boeing. If the contract is divisible (see Corbin 1960, pp. 694-699 or Farnsworth 1982, pp. 596-599), then it can be viewed as 100 separate contracts, so that United can breach by canceling part of its order without relieving Boeing of its responsibility to deliver the rest of the planes. With a divisible contract, United will breach efficiently, buying the 20 planes and canceling some of its order from Boeing. If Boeing's production cost is $80 million per plane, United will buy from Boeing only those planes whose marginal value exceeds $80 million, and pay Boeing its expectancy of $20 million on each canceled plane. A divisible contract gives United the decision rights over quantity, at least for quantities below the contract quantity of 100 airplanes.

Consider, in contrast, what would happen if the contract were entire; that is, if breach of any part of the contract entitled the victim to an expectation remedy on the whole contract and relieved her of all duties of delivery. Then, if United bought the 20 planes and consequently canceled delivery on some of its order, Boeing could sue for its expectancy on the entire 100 planes and deliver nothing. With an entire contract, Boeing could insist on making more than its expectancy to produce the planes that United still wants. Whether United will buy the 20 planes will now depend upon how much surplus it anticipates Boeing will extract in bargaining after the breach decision. If United expects to capture all the surplus, the result will be efficient just as under the divisible contract. On the other hand, if United anticipates a serious holdup problem, United may not buy the 20 planes in the first place because it would risk losing its surplus on its contract with Boeing. The lesson: The efficiency of breach under expectation damages may depend upon whether a contract is divisible or entire. In the example above, when the contract is divisible, United is the residual claimant and can make unilateral

efficient breach decisions; when it is entire, Boeing and United share claims and so, to ensure efficiency, they must be able to renegotiate before United decides whether to buy the 20 planes.

We now turn to reliance damages. Reliance damages are intended to protect the reliance interest of the victim of a breach by making sure she is as well off as she would have been had the contract not been signed. In example 1, this might mean Buyer would only have to reimburse Craftsman her $350 on materials and labour. At the time Buyer considers breach, we can think of him as already owing $350 and facing a remaining price of $650 = $1,000 - $350 if he still wants the desk. Under reliance damages, breach may be inefficient; in particular, Buyer will breach inefficiently if his willingness-to-pay given his other opportunities lies between $250 (the remaining cost of building the desk) and $650 (the remaining price to Buyer). If his valuation is less than $250, he breaches efficiently. If it exceeds $650, he efficiently decides not to breach.

The possibility that reliance damages lead to an inefficient breach decision arises when reliance damages differ from expectation damages. If the market for customized desks had been perfectly competitive, with price equal to cost ($600), then the two damage measures would have been the same, as Cooter and Eisenberg (1985) argue they frequently are. In that case, breach would be efficient because the remaining price to the buyer would be $250, the same as the remaining cost of building the desk.

Before moving on to cases where renegotiation is possible at all stages, we will consider example 2 below, which shows that a specific performance order can be quite inefficient if parties cannot renegotiate at all stages.

Example 2. Tenant leases an apartment from Landlord for one year at $500/month, and has no right to sublet or assign. Four months later, Tenant finds an apartment more to her liking, but Landlord is out of the country and cannot be reached. Tenant must decide whether to lease the second apartment and move out, without being able to renegotiate with Landlord.

Will Tenant make an efficient decision? If Landlord's best remedy is to re-rent

the apartment and collect any lost rent from Tenant — expectation damages — then Tenant's decision will be efficient, except in events where the market price has risen so that Landlord might profit from the breach. The issue of divisibility does not arise as it did in the Boeing example because if Tenant "cancels" the remaining eight months of the contract, Landlord cannot avoid performing on the first four months.

On the other hand, suppose damages were not the remedy. In particular, suppose Landlord can hold tenant to the lease, collecting rent as it becomes due — i.e., specific performance. Then, Tenant may inefficiently decide not to rent the second apartment, because if she does rent it, negotiating her way out of the first lease may cost her much more than the true economic damages to Landlord. This observation provides some justification for laws such as California Civil Code 1951.4 (1996), under which Landlord can only continue to collect rent after Tenant abandons property if Tenant has the right to sublet or assign. More generally, it provides some justification for specific performance being the default remedy in only a limited set of circumstances (see, e.g., Restatement (Second) of Contracts, Sections 359-369). It does not, however, justify making these limitations mandatory instead of simply default rules.

Efficient Reliance

After two parties enter a contract, one or the other often makes reliance investments that increase the value of trade. These may be expenditures of time, effort, or money; or a decision to forego other trading opportunities. Rogerson (1984) gave an apt example: once a concert promoter signs a band, he spends time and money promoting the concert, and these investments raise the value of the band's performance to the promoter. Consider, alternatively, the classic Fisher Body-General Motors example. After signing a long-term contract with General Motors, Fisher Body spent large sums buying specialized dies to stamp out auto bodies for General Motors cars. These expenditures lowered Fisher's cost of supply dramatically. (See, e.g., Klein, Crawford, and Alchian 1978). In order to focus our attention on reliance, we will follow the bulk of the recent liter-

ature in assuming here that parties can negotiate costlessly to an *ex post* efficient outcome before the breach decision; that way overall efficiency is determined by the efficiency of *ex ante* reliance, since *ex post* trade is always efficient.

The conventional wisdom is that specific performance, reliance damages, and expectation damages all promote overinvestment when parties sign noncontingent contracts. This point was first made by Shavell (1980) and was later extended by Rogerson (1984) to cases where renegotiation is possible. The intuition is straightforward for the expectation damages remedy. If the victim of breach receives her expectancy regardless of whether trade occurs, she is completely insured: to the extent that her reliance increases the value of trade to her, she will over-rely because she receives this return through trade if trade occurs, and through the damage payment if trade doesn't occur. When courts observe the consequences of over-reliance, one solution to this overinvestment problem is to modify the damage remedy by limiting the victim's entitlement to what her expectancy would have been had she not over-relied. (See Cooter and Eisenberg 1985, Chung 1992, and Spier and Whinston 1995.)

The conventional wisdom about overinvestment can be misleading, however. In particular, Chung (1991), Aghion, Dewatripont, and Rey (1994), Edlin and Reichelstein (1996), and Edlin (1996) show that it only holds for certain classes of contracts. Che and Chung (1996) show, additionally, that it only holds for certain classes of investments. The example below will illustrate these points. Subsequently, we will explore how two variations on the expectation measure of damages affect incentives.

Example 3. Buyer contracts to buy $\bar{q}$ units from Seller. Next, Seller chooses her reliance investment s. Third, uncertainty θ is realized: Buyer's marginal value of trade is $v = \theta - q$, where q is the quantity traded. Seller's marginal production cost is $c = c_0 - \sqrt{s}$. After the value of trade is revealed, the parties may renegotiate, trade, or possibly go to court.

Consider, first, the expectation damages remedy. Given the investment s and the contingency θ, the efficient quantity to trade is $q^* \equiv \theta - c_0 + \sqrt{s}$, which equates

marginal value with marginal cost. In contingencies where θ is low so that $q^* < \bar{q}$, either Buyer or Seller will consider breach. Assuming that the per-unit price p exceeds marginal cost, Seller won't breach, so we can focus for the moment on Buyer breach. As discussed in the airplane example above, if the contract is divisible, Buyer will breach only on units whose production is inefficient: he will buy q^* units and cancel $\bar{q} - q^*$ units of his order. Since Buyer must pay damages equal to the seller's lost profits (i.e., $p - c_0 + \sqrt{s}$ on each canceled unit), Seller realizes the cost savings $\sqrt{s}$ from her investment on the entire order $\bar{q}$. In these breach contingencies, Seller gets more than the actual production cost savings $q^*\sqrt{s}$ on the quantity produced: the difference is a *breach subsidy* from Buyer's damage payment.

The conventional wisdom that this subsidy will lead to overinvestment arose from considering models where q^* was never greater than $\bar{q}$. If q^* can be greater than $\bar{q}$, as Edlin and Reichelstein (1996) point out, the breach subsidy may simply balance the incentive for underinvestment coming from holdup contingencies where $q^* > \bar{q}$. In those contingencies, Buyer and Seller renegotiate over the surplus $\frac{1}{2}(q^* - \bar{q})^2$ from trading q^* units instead of $\bar{q}$ units (the surplus equals the area below the demand curve and above the supply curve between $\bar{q}$ and q^*). Generally, Buyer will capture some share of the surplus, so that the more Seller invests, lowering her cost, the lower the price Buyer ends up paying for the extra units. This means that Seller does not capture the full cost savings from her investment – she captures the full cost savings on the $\bar{q}$ units in the contract, but only a fraction corresponding to her bargaining power of the savings on the $q^* - \bar{q}$ units, the units she must bargain to acquire. Effectively, Buyer levies a *holdup tax* on the marginal return to Seller's investment.

By choosing the contract quantity $\bar{q}$ appropriately (equal to the expected efficient level of trade), the parties can balance the holdup tax against the breach subsidy, thereby promoting efficient investment. Contrary to the conventional wisdom, then, the investment subsidies from contract remedies need not cause overinvestment; instead, the subsidy may serve to counter holdups.

In Shavell (1980) and Rogerson (1984), who study cases analogous to the desk sale in example 1, the breach subsidy leads to overinvestment because $\bar{q} = 1$ and it is never efficient to trade more than $\bar{q}$, so that holdups never arise. Note, though, that even in example 1, efficient investment is possible if the parties write a contract that says that the desk should be traded only "sometimes." Then, holdups can emerge on occasions where the contract does not obligate Buyer to trade, even though trade is efficient.

The analysis of efficient reliance under specific performance follows a logic similar to that of the expectation damages case. Differences arise, though, because if a court will enforce performance, then when $q^* < \bar{q}$ Buyer can no longer unilaterally breach and capture the surplus from trading q^* instead of $\bar{q}$. This is comparable to the situation of $q^* > \bar{q}$ under other breach remedies – efficient trade does not occur unless both sides agree to trade q^*. We will call the additional surplus generated by trading q^* rather than $\bar{q}$ the *renegotiation surplus*. If Seller attains a constant share γ of the renegotiation surplus, then Seller has efficient incentives provided that $\bar{q}$ is set equal to the expected efficient level of trade conditional on efficient investment. Under such a contract, Seller will be under-compensated for her investment in contingencies where $q^* > \bar{q}$, and over-compensated when $q^* < \bar{q}$. On balance, though, compensation equals the social return and investment will be efficient. In fact, if Buyer can shift his demand curve by investing b, so that $v = \theta - q + \sqrt{b}$, Buyer will also have efficient investment incentives, as Edlin and Reichelstein (1996) showed. These valuation functions were chosen to satisfy the separability condition in Edlin and Reichelstein. If it were possible to commit to allocate all the surplus in renegotiation to one party, then both parties could be given efficient investment incentives under specific performance without separability, as Aghion, Dewatripont and Rey (1994) and Chung (1991) show.

Balancing investment incentives for both Buyer and Seller at once is not possible under expectation damages, because when Buyer breaches, only Seller gets a breach subsidy – Buyer captures the residual surplus, and so gets exactly the social return on his investment b. Hence, for Buyer to have efficient investment in-

centives, we would need a $\bar{q}$ so high that all efficient modifications are downward; this would eliminate the holdup tax on the Buyer, which would otherwise cause under-investment. Balancing the holdup tax against the breach subsidy for Seller, however, requires some intermediate $\bar{q}$. Expectation damages thus creates a fundamental asymmetry between incentives for the contract breacher and incentives for the breach victim.

Based upon this last observation, Edlin (1996) presents another class of contracts for which the conventional wisdom about standard contract remedies causing over-reliance does not apply. In situations where parties can control which party breaches using up-front payments and suitable trading prices, expectation damages can lead to efficient reliance incentives for one party, even when reliance investments involve complex multi-dimensional choices of assets with varying levels of specificity or generality of use. Recall that breach is efficient if the expectation damages remedy ensures that the breach victim gets exactly her expectancy, leaving the breacher any residual surplus. The breacher, then, makes *breach* decisions to maximize this surplus. In just the same way, the breacher will make *reliance* decisions to maximize this surplus. Therefore, another way to give Seller efficient investment incentives is to structure the contract so that all modifications involve her unilateral breach. First, this requires that the contract quantity $\bar{q}$ be set so high that it is never (read rarely) efficient to trade more, since trading more requires agreement, and bargaining over the surplus imposes a holdup tax. (Edlin terms such contracts "Cadillac contracts".) Second, the trading price must be changed. Recall that Seller did not breach in example 3 because price exceeded marginal cost. The price must be set below marginal cost to induce Seller to be the breaching party, and it must be set low enough that Buyer does not want to breach. Such a contract is efficient, but not profitable for Seller. To make it profitable, Buyer must pay Seller an up-front payment.

We must make some assumptions about the legal status of this up-front payment in order for this solution to provide efficient investment incentives. Specifically, the Buyer must not be able to breach and subsequently sue for a return of

his up-front payment under restitutionary reasoning, or to argue that the payment is not in consideration of investment, but constitutes illegal punitive damages in the form of a deposit; otherwise, there will be a "race to breach," and Seller may not retain the surplus. Edlin (1996) discusses these legal complications at more length.

Che and Chung (1996) give a different class of circumstances – investments in quality – under which the conventional wisdom of overinvestment is wrong. They point out that most research has focused on "self investments" – that is, reliance investments by a seller that reduce her subsequent production costs or investments by a buyer that enhance his valuation of the seller's performance. Investments that they term "cooperative" have a very different character. For instance, when a seller invests in high quality production, the direct benefits accrue to the buyer; the seller benefits only to the extent that she can raise her price. In principle, a buyer may likewise make investments that reduce the seller's costs. For instance, in example 3, s might represent a buyer's investment in trucks that make it easier for the seller to load her goods (when loading is seller's responsibility); alternatively, the buyer might invest by providing easily readable designs to the seller. In all of these cases, Che and Chung show that a buyer will have too little incentive – not too much incentive – to invest when a simple noncontingent contract is backed up by an expectation damages remedy. The intuition is straightforward. Consider the contract to build a desk in example 1. If Craftsman receives her expectancy regardless of whether she builds a high or low quality desk, she will shirk and build a low quality desk. In contrast, under a reliance remedy, Craftsman could only recover her expenditures, and so would earn more if Buyer performed than if Buyer breached. In that case, Craftsman has an incentive to build a higher quality desk to discourage breach. The cost of a reliance remedy in this circumstance is that Buyer may breach too frequently because true damages are lower than expectation damages. When renegotiation is possible, however, this problem disappears, and Che and Chung show that a reliance remedy achieves the first best outcome. In contrast, expectation damages and specific performance typically induce too little

investment in such "cooperative" investments.

Contract remedies often do not fit neatly into the categories so far described. There are myriad variations and hybrids, too many to discuss fully here. Consider, for example, a buyer's right to "cover" by obtaining a substitute performance and then suing for the difference between the contract price and the cost of the substitute performance. Since it is often difficult for a court to determine what the value of performance would have been to a buyer, the option of choosing to cover may be necessary for the buyer to get the benefit of his bargain. As the example below illustrates, this variant on expectation damages provides the buyer, though not the seller, with incentives that may resemble specific performance—i.e., the buyer gets a smaller breach subsidy than under an ideal expectation remedy. The breach subsidy disappears entirely if, as under the Uniform Commercial Code Section 2-713 (1989), the buyer can sue for the damages that he would be entitled to if he covered, without actually effecting cover.

Example 4. The buyer places a value $v(b)$ on the seller's promised performance, where b represents the buyer's reliance investment. Let k denote the contract price and c the cost to the buyer of obtaining substitute performance, and likewise the cost to the seller of performance.

Consider a contingency in which the cost of performance is very high, so that $c > v(b) > k$. If the seller breaches, the buyer's expectation damages are $v(b) - k$. In many cases, as authors such as Schwartz (1990) argue, courts will not observe $v(b)$ and will systematically underestimate it by excluding certain types of damages.

The buyer does, however, often have the right to purchase substitute performance at the price c, and to collect $c - k$ in damages. Although this remedy leaves the buyer with the same total payoff as under expectation damages, obtaining substitute performance is inefficient since $c > v(b)$. If the threat of purchasing substitute performance is the relevant threat point for negotiation, we might expect the buyer and seller to agree to a settlement in which the buyer does not have to purchase substitute performance and the seller pays $gc + (1-g)v(b) - k$, where

g is a number between 0 and 1 that represents the buyer's bargaining power. If the buyer has the *right* to sue for $c - k$ without purchasing substitute performance, he has all the bargaining power and $g = 1$. As noted above, when the Uniform Commercial Code Section 2-713 (1989) applies, the buyer has such a right even though this remedy will yield the buyer a surplus over his expectancy in cases where he prefers to have the money than to cover. The rule, and hence g, varies with the jurisdiction and the issue, as Treitel (1991, p. 106) indicates; in cases where performance is defective, Treitel suggests that the cost of curing the performance should not be the measure of damages when "cure will not be effected."

We can now examine the investment incentives provided by the option to cover. In contingencies where $c > v(b)$, there is no social return to b because both performance and substitute performance are inefficient. The buyer, nonetheless, gets some return from investing to increase v, provided that $g < 1$. When $g = 0$, the buyer is "fully insured" as in the idealized expectation damages discussion earlier, and receives a large breach subsidy. However, to the extent that the buyer has bargaining power and $g > 0$, the tendency to overinvest caused by the breach subsidy is smaller, and comparable to what it would be under specific performance. The incentives for the seller will not, however, resemble specific performance if her performance cannot be compelled. Finally, in cases where the buyer has the right to sue for the difference between market price and contract price, the buyer will receive no breach subsidy because the right to sue makes $g = 1$, and the buyer's payoff becomes independent of b.

A final variation on expectation damages is the rule of *Hadley v. Baxendale* limiting the scope of liability for breach in cases where damages are unforeseeable to the promisor (see Dobbs 1973, section 12.3, at 804 or Eisenberg 1992). Several authors analyze this rule in models where one party is poorly informed about the potential damages. Ayres and Gertner (1989, 1992) argue that it often makes sense to penalize those with unusually high damages (who fail to reveal this potential) in order to induce disclosure, so that the promisee can take particular care to avoid

breach. Disclosing a high cost and writing a special contract is costly for those who, like Hadley, may have unusually large damages. Bebchuk and Shavell (1991) show that limiting liability is efficient provided that (1) these disclosure costs are exceeded by the cost of suboptimal care, (2) promisees are in a competitive market, and (3) those with high damages are in the minority.

Contracting for a Remedy

The analysis thus far suggests that expectation damages may be a good default remedy. Breach is largely efficient under the expectation remedy, even if renegotiation is not possible, and particularly if contracts are construed as divisible where possible. In many situations, this remedy does not promote overinvestment, contrary to conventional wisdom, but instead balances this breach subsidy with the holdup effect which would otherwise cause underinvestment.

Parties can be expected to contract for a breach remedy that maximizes their joint surplus, as long as courts allow them this freedom and certain mild bargaining conditions from Hermalin and Katz (1993) are satisfied. The parties may, however, not contract for expectation damages. They may, for example, agree to limit damages to reliance investments when quality is an important consideration that cannot be easily put in a contract and verified, because this limitation will give the supplier an incentive to make high quality goods in order to discourage breach, as pointed out by Che and Chung. Alternatively, parties will sometimes ask for specific performance, negative injunctions, or high liquidated damages that force both parties to bargain together and agree to any modifications of the plan set out in the contract. As explained earlier, Edlin and Reichelstein argue that this can create balanced investment incentives that are important when both parties should be making reliance investments. More recently, Edlin and Hermalin (1997) explore an agency model with renegotiation and find another reason that parties may want supra-compensatory remedies. The essential intuition of Edlin and Hermalin is that when effort is difficult to observe, then a party may often get away with breach, and so must be punished when breach is actually "proven"; this intuition is similar to Becker's (1968) observation that if a criminal is only ap-

prehended occasionally, the penalty must exceed the social cost to induce optimal deterrence.

There are two classes of circumstances in which judicial modification of a remedy specified in the contract could promote Kaldor-Hicks efficiency. First, courts could try to prevent adverse consequences to third parties that the contracting parties do not concern themselves with. (See Diamond and Maskin 1979, Aghion and Bolton 1987, Spier and Whinston 1995, Chung 1995, and Gilbert and Shapiro 1997.) Second, one party may have worse information than the other. Schwartz (1990) and Stole (1992) both argue that asymmetrically-informed parties will typically not agree to supracompensatory damages, so asymmetric information provides little justification for the law's hostility to supracompensatory remedies (see Restatement (Second) of Contracts, Sections 356, 359 (1) 1981; Uniform Commercial Code Sections 2-718 (1), 2-716 (1) 1989). In some cases, however, asymmetric information can justify courts placing low limits on damages (limits below compensatory levels). Hermalin and Aghion (1990), for example, show some circumstances in which limiting damages or collateral could shrink the signaling space and lead to a Pareto improvement. One suspects, however, that courts will often do a poor job identifying such circumstances and tailoring an appropriate remedy.

Taken together, these arguments suggest that expectation damages is a good default remedy, but that other remedies — including reliance damages, specific performance, injunctions, and high liquidated damages — should generally be enforceable if parties express that preference in their contract.

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