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# Commodifying Liability

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by

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## Abstract:

In recent years, ingenious entrepreneurs have invented new commodities by bundling contingent claims and marketing them. A liability right can be viewed as a contingent claim and analyzed like stock options or commodity futures. Since law prohibits markets for liability rights, no one knows how they would work. I assume no legal impediments to unbundling, packaging, and selling liability rights, and then I imagine how such markets might solve some legal problems. When contracts reallocate tort liability, courts often invalidate the terms on grounds of inadequate consent. Competitive markets for liability rights could solve this problem by pricing liability rights at the true value of the underlying risk. Tort reformers also struggle for a way to combine efficient deterrence and efficient insurance. Competitive markets for liability rights could solve this problem by the potential accident victim retaining the rights desired for insurance and selling the rest to, say, a lawyer whose assertion of the rights would deter.

## Commodifying Liability<sup>1</sup>

A contingent claim is a right to receive money or goods in the event that a possible event actually occurs. Different people place different values on the risks represented by contingent claims. These differences create potential gains from trade that an efficient market exhausts. Beginning in the 1950's, general equilibrium theorists produced increasingly robust proofs that a complete set of competitive markets for contingent claims allocates risks efficiently (Arrow and Hahn 1971). General equilibrium theorists apparently had in mind such contingent claims as stock options, insurance, commodity futures. Their arguments, however, also apply in principle to legal liability for some kinds of harm.

A liability right is conventionally defined as a right of the victim to receive money compensation from the injurer in the event that possible harm actually occurs (Calabresi and Melamed 1972). A liability right thus combines the victim's right and the injurer's liability. A liability right is contingent upon conditions stipulated in law (Cooter 1991). When the contingencies occur, a liability right matures into a legal right of action. The contingencies include actual harm to the victim caused by the injurer or, possibly, caused by the injurer's negligence. Legal systems typically do not allow a suit for exposure to risk, as opposed to materialized risk.

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<sup>1</sup> This article expands upon **(Cooter 1997 forthcoming)**, which develops ideas first proposed in **(Cooter 1989)**.

In principle, the victim could transfer his right to receive damages to someone else, and the injurer could pay someone else to assume his obligation to pay damages. The transfers could occur before or after the liability right matures. To illustrate transfer of an unmatured liability right, a person who purchases medical insurance typically assigns to the insurer any legal rights to compensation for medical costs arising from accidents (“subrogation clause”). Similarly, a company that purchases liability insurance pays the insurer to assume liability. To illustrate transfer of matured liability rights, an accident victim who sues the injurer in the US typically retains an attorney on a contingent fee, which assigns approximately 1/3 of any court judgment to the plaintiff’s attorney.

In some American jurisdictions companies of non-lawyers buy awards on appeal. To illustrate, the Judgment Purchase Corporation will buy 50% of judgments awarded at trial for cases pending appeal, provided the judgment exceeds \$300,000 and satisfies certain other conditions.<sup>2</sup> In a piquant example of what the future may hold, a plaintiff recently issued a prospectus acceptable to the Securities Exchange Commission offering to sell 100,000 shares at \$5 per share for the claims of John Designer in his lawsuit against Tip Top Toys, Inc.<sup>3</sup>

Different people place different values on the risks that trigger liability, and these different valuations create potential gains from trade. To realize these gains, a potential victim should sell the right to receive damages to someone who values it more, and a potential injurer should pay someone else to bear

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<sup>2</sup> See the internet advertisement at [http://www.lawfinance.com/lf\\_paper.cgi](http://www.lawfinance.com/lf_paper.cgi).

liability who can do so at less cost. If perfect markets for liability rights existed, they would reach equilibrium when every right to receive damages is owned by the party who values it the most, and every duty to pay damages is held by the party who can bear it at least cost. Such an equilibrium is Pareto efficient with respect to the allocation of matured and unmatured liability rights. Exchange in a complete set of perfectly competitive markets allocates liability rights efficiently, regardless of the initial allocation by law.

Law often impedes or forbids the exchange of liability rights, especially liability arising from accidents. For example, consumers and manufacturers cannot usually contract to modify the rights of consumers to receive compensation for injuries caused by defective products. Courts disallow so many contracts to waive, disclaim, modify, or transfer liability for accidental harm that tort scholarship proclaims the decline or death of contracts for liability rights (Atiyah 1979) (Calabresi 1976) (Gilmore 1974). While the law typically prohibits consumers from selling immature liability rights to potential injurers, these transactions are permitted once the liability right matures. Specifically, the injurer can purchase all the victim's mature liability rights simply by settling the case out of court. A settlement transfers the liability right from the plaintiff to the defendant.

In common law countries, the old doctrine called champerty prohibits one person from asserting another's legal right (**Painter 1995; Painter 1997**). The doctrine has eroded in America to the point that an attorney can purchase a

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<sup>3</sup> View the prospectus at [http://www.lawmall.com/files/suit\\_oc2.html](http://www.lawmall.com/files/suit_oc2.html).

fraction, but not all, of a future judgment through the contingent fee. Many countries outside the US, including continental Europe, forbid contingent fees for lawyers. Everywhere, the people in the profession with the most expert knowledge about the value of liability rights are restricted or prohibited by law from buying them.

The law may not recognize liability rights as security for a debt (**Weinberg 1994-1995**). Some specific liability rights, such as the right to recover in medical malpractice, are not assignable in some jurisdictions (**Bell 1992**). Although injurers can purchase liability insurance, some restrictions exist. To illustrate many American states prohibit liability insurance for punitive damages, even though people especially want to insure against large, unpredictable losses.

What would happen if the legal impediments to markets for liability rights were removed? . No one can accurately predict such market developments. Presumably some markets would flourish and others would fail, depending upon the kind of liability right. Inefficiencies in liability law impose high costs on society (Huber 1988; Viscusi 1996). Scholars disagree about whether markets for liability rights might reduce inefficiencies and improve the law.<sup>4</sup> I believe that many of the historical abuses of contracts for liability rights resulted from the

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<sup>4</sup> Some legal theorists favor allowing disclaimers and waivers, or developing new contracts to exchange liability rights (Havighurst 1986; Priest 1981; Rubin 1997) (**Cooter 1989**) (**Choharis 1995**). Other scholars are more circumspect about contract remedies in torts (**Geistfeld 1994**) (O'Connell and Joost 1986) or hostile to them (**Bell 1990; Croley and Hanson 1993**), and some scholars favor dramatic non-contractual reforms (**Croley and Hanson 1993**). A general discussion of possible problems with such markets concern externalities and interdependencies (Arrow 1969) (Cooter 1980; Starrett 1972).

absence of competition, not exchange itself. Competitive exchange holds promise as a remedy for inefficient tort laws.

Instead of impeding exchange, law should facilitate competition in markets for liability rights. When legal impediments block exchange, people with different valuations cannot realize gains from trade. I will examine the main causes of different valuations, describe the legal impediments, and speculate on how markets might emerge if the legal impediments were removed. Perfect competition reduces a good to a standardized commodity with a high volume of sales. My subject, consequently, is commodifying liability.

#### Deterrence versus Insurance

Potential victims of accidents desire deterrence and insurance. I will explain how this desire creates a strong incentive to exchange liability rights. In simple tort models, optimal deterrence requires injurers to internalize the external benefit of avoiding accidents. In these simple models, injurers internalize the external benefits of precaution when they are liable for perfectly compensatory damages (Brown 1973). Damages are perfectly compensatory when they restore the victim to the same level of utility as he would have enjoyed without the injury. In other words, the victim is indifferent between no injury or an injury with perfectly compensatory damages.

Courts distinguish between economic and non-economic losses caused by accidents. The economic losses include property damage, lost wages, and medical costs. The non-economic losses include pain, suffering, emotional distress, and lost companionship. Optimal deterrence requires perfect

compensation, and perfect compensation requires damages for economic and non-economic losses. To illustrate concretely, assume an accident causes losses of 20 for hospitalization, 50 for lost wages, and 30 for pain and suffering.<sup>5</sup> Perfect compensation requires damages equal to 100. Assume the injurer can take precautions that reduce the probability of an accident. When the injurer decides how much precaution to take, liability of 100 causes the injurer to internalize the full gain that more precaution conveys upon the potential victim. Consequently, the injurer balances his own costs of precaution against its benefit to the victim.

The right to receive perfectly compensatory damages fully insures potential victims against the destruction of value in accidents where the injurer is liable. Full insurance, however, may not be optimal. People buy insurance in order to shift money from a state of the world in which money is needed less to a

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<sup>5</sup> (Viscusi 1991).

"Data collected in 1977 indicated that pain and suffering accounted for some 30-57 percent of the amounts awarded by juries in personal injury suits, with these proportions varying according to the nature of the injury." quote from Calfee and Winston, 1993, at page 133, citing Viscusi at p102.



state of the world in which money is needed more. In other words, people buy insurance against accidents that increase the marginal utility of money. In the typical case, economic losses cause the marginal utility of money to rise, so people will buy insurance against economic losses. In the typical case, however, non-economic losses do not cause the marginal utility of money to rise, so people will not buy insurance against non-economic losses losses.<sup>6</sup>

The economic waste from compulsory over-insurance has been estimated for some aspects of tort liability (Calfee and Winston 1993). To illustrate, the annual deadweight loss from overinsurance in automobile-related pain and suffering liability judgments in the US was estimated to exceed \$1 billion for each of several types of injuries, leading to a total annual loss from all injuries equal to some multiple of \$7 billion (page 152).

I have explained why people will pay to reduce the probability of economic and non-economic losses, and why people will only pay to insure against economic losses. Law that pursues the ideal of perfect compensation or the goal of optimal deterrence awards damages for economic and non-economic

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<sup>6</sup> (Viscusi 1993)

: "Although there is no evidence supporting the desire to ensure pain and suffering compensation in the case of job injuries, for less severe product injuries the evidence is consistent with such compensation... Thus, pain and suffering compensation is potentially desirable from the standpoint of optimal insurance in the case of these minor injuries, whereas it is apparently not as desirable in the case of more severe outcomes." p181 (Cook and Graham 1977). (Rare examples of people buying insurance against pain are found in (Croley and Hanson 1995).)

losses, thus over-insuring. Law that pursues the goal of optimal insurance does not award damages for non-economic losses, thus under-detering.

To illustrate concretely, return to the example of an accident that imposes economic losses of 70 and non-economic losses of 30. A tort system similar to the US, which provides large awards for pain and suffering, will set liability approximately at 100, thus achieving optimal deterrence of the injurer. The victim, however, probably has no desire to insure against pain and suffering, in which case a tort system that sets liability at 100 over-insures the victim. A tort system similar to Germany's, which provides little compensation for pain and suffering, will set liability closer to 70, thus under-detering the injurer and supplying the efficient amount of insurance to the victim.

An accident that results in a child's death provides a more dramatic example. A typical parent will pay a relatively high amount to reduce the risk of his child's accidental death, so the law should extract relatively large damages from an injurer for the sake of deterrence. The death of a child, however, typically reduces a parent's need for money, so a typical parent does not insure against his child's death. The law should extract relatively small damages from an injurer for the sake of insurance.

Combining optimal deterrence and optimal insurance requires the potential injurer to pay relatively high damages and the potential victim to receive relatively low damages. In private law, the injurer's obligation to pay damages usually *equals* the victim's right to receive damages. This equality creates a

tradeoff between the two goals, and different legal systems respond differently to this trade-off. To achieve both goals, law must decouple payments to the injurer and victim. Specifically, law can require the injurer to pay a relatively high fine to the state and relatively low damages to the victim (Polinsky and Che 1991).

To illustrate decoupling in the preceding example, law can require the injurer to pay 70 to the victim as compensation and 30 to the state as a fine. Decoupling by law, however, gives injurers and victims an incentive to settle privately to avoid paying a fine to the state. In this example, the private parties might settle for 85 without notifying the state. By avoiding the fine, the victim receives 15 more than the court would award at trial, and the injurer pays 15 less than he would owe after a trial.

To circumvent this problem, decoupling can occur through markets rather than laws. When the liability system provides the potential accident victim with unwanted insurance, a market for liability rights permits him to sell it. If the buyer is anyone other than the potential injurer, the sale reduces insurance without reducing deterrence. To illustrate, a potential victim with liability rights equal to 100, who wants insurance equal to 70, can sell the right to recover damages equal to 30. The buyer might be a law firm specializing in accidents. After completing the sale, the victim of an injury recovers 70 in damages as required for optimal insurance, and the injurer pays a total of 100 -- 70 to the victim and 30 to the law firm -- as required for optimal deterrence. Thus sales of unmatured tort claims by potential victims to third parties eliminates unwanted insurance without reducing the injurer's incentives for precaution.

Instead of restricting sales to third parties, suppose the potential victim can sell a liability right to the potential injurer. The sale eliminates a legal cause of action and thus reduces the injurer's potential liability. To illustrate, the manufacturer of a product might lower the price to any buyer who agrees to assume the risk that a defect will cause an accident resulting in pain and suffering.

What is the effect on deterrence? In simple tort models, a reduction in liability reduces the injurer's incentives for precaution. To illustrate by the preceding example, an injurer who buys the victim's right to receive damages of 30 reduces his liability from 100 to 70. After the transaction, the injurer internalizes only 70% of the benefit of avoiding an accident, so the injurer may reduce his precaution and the number of accidents may increase.

Competition tends to prevent this erosion of incentives. The market price of liability rights responds to the frequency and magnitude of damages. To be more precise, the price of an unmatured liability right in competitive equilibrium roughly equals the expected judgment in the event of an accident, discounted by the probability of an accident (Cooter 1989). By reducing precaution and increasing the number of accidents, an injurer causes the price of liability rights to rise. The rise in price reduces the profitability of the injurer's strategy of buying liability rights in order to reduce precaution.

To illustrate, assume that an injurer planned to purchase liability rights from potential victims and then reduce his precaution. Firms that understand the injurer's strategy will buy liability rights in anticipation of a rise in their price. The

rise in the price of liability rights increases the cost to the injurer of pursuing his strategy. As an alternative strategy, the injurer could commit to taking efficient precaution, thus reducing the market price that the injurer must pay to buy liability rights from victims.

As a concrete example, assume that you buy a used Volvo and assume that the Volvo company is liable to you for accidental pain and suffering caused by a manufacturing defect. The cost of this liability to Volvo may exceed its value to you. Someone can profit from brokering a transaction between Volvo and you. Your auto insurer is the obvious broker. So you might get a reduction in your auto insurance premium in exchange for transferring to the insurer your liability right against Volvo. Your insurer would then resell such liability rights in bulk to Volvo, thus extinguishing such suits. If Volvo gets too careless, a law firm specializing in liability rights might outbid Volvo and purchase a block of liability rights from your insurer.

As another illustration, consider how a market for liability rights might cause a motorist re-package liability rights and insurance pertaining to automobile accidents. Under existing law, the innocent victim of an accident caused by someone else usually has the right to recover collision damage to the car, hospitalization, lost wages, and pain and suffering. Many motorists purchase insurance against collision and hospitalization. Such insurance contracts usually transfer the insured's right to damages to the insurer. As for pain and suffering, the motorist might not want insurance. Given markets for unmatured liability right, the potential victim might sell his right to compensation

for pain and suffering, and law firms might bid to purchase these unmatured liability rights. Finally, the motorist might choose to retain his right to recover lost wages from an injurer. In this example, the potential victim re-packages his unmatured liability rights into elements subrogated to an insurer, sold to a law firm, and retained for himself.

Consider how a market might apply to liability rights for punitive damages. Some punitive damages are a disguised form of compensation, which is awarded when the actual damage is difficult to compute or the law precludes full compensation.<sup>7</sup> More typically, however, punitive damages supplement compensation, resulting in awards that over-compensate relative to the actual harm. In either case, the unpredictability of punitive damages imposes significant costs on risk-averse injurers. Many potential injurers would, consequently, buy the unmatured rights of potential victims to punitive damages at a higher price than potential injurers would charge to part with these rights.<sup>8</sup>

### 1<sup>st</sup> Party or 3<sup>rd</sup> Party Insurance?

I explained that liability law provides unwanted insurance and creates an incentive to sell liability rights. The preceding discussion assumed that insurance is unwanted because the harm does not increase the marginal utility of money. Another reason why the victim may not want the injurer to provide insurance is that the victim can buy it cheaper.

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<sup>7</sup> I agree with Craswell that this is a bit of a sham that confuses categories (Craswell 1996).

<sup>8</sup> A novel theory of punitive damages that would require changes in my argument is found in (Daughtey and Reinganum 1997), who asserts that punitive damages can force a monopolist to represent product safety accurately.

To illustrate, consider a manufacturer who sells a product to a retailer, who resells the product to a consumer. If the manufacturer is strictly liability for consumer product injuries, then the manufacturer in effect sells a joint product consisting in a manufactured good and an insurance policy. In contrast, a rule of no liability exposes the consumer to the risk of injury, thus providing an incentive for the consumer to purchase his own insurance. No-liability induces 1<sup>st</sup> party insurance, and strict liability induces 3<sup>rd</sup> party insurance. If 3<sup>rd</sup> party insurance is cheaper than 1<sup>st</sup> party insurance, then a rule of strict liability is more efficient than a rule of no liability in simple tort models. Conversely, if 1<sup>st</sup> party insurance is cheaper than 3<sup>rd</sup> party insurance, then a rule of no liability is more efficient than a rule of strict liability in simple tort models.

Priest argues that the legal doctrine of enterprise liability replaced relatively cheap 1<sup>st</sup> party insurance with relatively expensive 3<sup>rd</sup> party insurance (Priest 1985; Priest 1991). If Priest is right, lawmakers created the wrong rule that imposes excessive insurance costs upon consumers. A market for liability rights can correct this mistake. By assumption, the consumer can insure at less cost than the manufacturer, so a rule of law assigning liability to the manufacturer creates a surplus from exchange. The manufacturer can profitably buy the consumer's liability right at a price exceeding the consumer's cost of insurance. A consumer who sells a liability right and buys insurance converts 3<sup>rd</sup> party insurance into 1<sup>st</sup> party insurance.

1<sup>st</sup> party insurance is often cheaper because of economies of scope. To illustrate, a motorist involved in an automobile accident needs the same amount

of insurance regardless of whether the accident was his fault, the fault of another driver, or no one's fault. In general, the need for insurance depends upon the harm, whereas liability depends upon the cause. A comprehensive insurance policy can provide protection against a particular harm, regardless of its cause. Comprehensive insurance save money because of economies of scope.

On the other hand, 3<sup>rd</sup> party insurance can be cheaper for reasons of deterrence. The manufacturer can often reduce the frequency and magnitude of accidents caused by defective products at less cost than the consumer. Strict liability for consumer product injuries provides a strong incentive for the manufacturer to take precautions against defective products. If the manufacturer purchases liability insurance, the insurance company monitors claims to assure that the manufacturer takes precautions. Monitoring of the manufacturer, however, would be difficult or impossible for the consumer's insurance company.

I have explained why 1<sup>st</sup> party insurance may be cheaper than 3<sup>rd</sup> party insurance in some circumstances, and the opposite may be true in other circumstances. Markets for liability rights would allow the parties to adjust insurance to circumstances.

#### Transaction Costs

Schwartz found that the plaintiffs' legal costs in the typical American tort suit equal between 29% and 44% of the damages awarded (Schwartz 1985). Assuming defendant's legal costs are similar in magnitude, total legal costs exceed 60% of the damages awarded. Are legal processes worth their cost? Academic literature on dispute resolution contradicts itself on this question.



Merchant associations that set their own rules typically resolve disputes by cheap mechanisms (Bernstein 1992). When associations of merchants create mechanisms for resolving disputes, they typically dispense with most procedural protections found in courts. To illustrate, the Visa arbitration committee decides all disputes among banks concerning liability for payments losses based on written documents alone without appeal (Rubin and Cooter 1994). Similarly, arbitration before the International Chamber of Commerce in Paris prohibits appeals and allows the arbitrators great flexibility in choosing a process to resolve the dispute. In contrast, psychological studies report that peoples' satisfaction with dispute resolution depends upon process even more than outcomes (**Lind and Tyler 1988; Tyler 1990**). In brief, business studies suggest low values for process rights, whereas psychological studies suggest high values.

In any case, reducing the costs of resolving disputes motivates many proposals for tort reform, such as proposals for no-fault rules (O'Connell and Joost 1986). Instead of changing the legal process, markets for liability rights could reduce the transaction costs of resolving disputes. The potential injurer who buys an unmatured liability right extinguishes the potential plaintiff's claim before an accident occurs. In the event of an accident, no one will incur the high cost of asserting legal claim and resolving a legal dispute. Thus the sale of liability rights can convert the effective regime from fault to no-fault without actually changing the law.

In general, the ability of someone to lower the cost of resolving disputes increases the value they place upon a liability right, so exchange tends to move liability rights to people who can resolve disputes at low transaction costs. Aggregating unmature claims can save transaction costs by realizing economies of scale. To illustrate, many drivers purchase collision and liability insurance. When such drivers collide in an accident, each driver receives compensation from his insurer. Questions of liability are resolved by the two insurance companies. Insurance companies in repeat transaction with each other seldom go to trial. By engaging in wholesale transactions, insurance companies can streamline the processes for resolving disputes with each other.

This same process does not work for personal injuries caused by automobile accidents or consumer product injuries. In these case, the tort system provides damages exceeding the private insurance of the parties. Consequently, after the parties file claims with their insurance companies, tort claims exceeding their insurance remain to be resolved. For example, the tort system gives damages for pain and suffering, but the parties typically do not buy insurance for pain and suffering. To obtain compensation for pain and suffering, the tort victim must assert the legal claim against the injurer, rather than filing a claim with his insurance company.

A market for liability rights could change these facts. If the tort victim sold his unmature claims to pain and suffering damages, his remaining claims from an accident might be covered by insurance. When victim and injurer have private insurance for the full amount of the legal claim, the parties can deal with

their insurance companies and their insurance companies can resolve liability with each other.

Like dispute resolution, the transaction costs of markets for liability rights are large. Reducing the transaction costs of market exchange requires aggregating unmatured liability rights in order to transact in bulk. To illustrate by an earlier example, many drivers purchase collision and liability insurance. When such drivers collide in an accident, each driver receives compensation from his insurer, and questions of liability are resolved by the two insurance companies. By engaging in wholesale transactions, insurance companies can streamline the processes for resolving disputes with each other.

Markets in liability rights could extend these practices of aggregating to reduce transaction costs. For example, insurers could offer lower premiums to drivers who transferred all their liability rights to the insurance company, including the right to damages for pain and suffering. In the event of an accident involving two drivers with such insurance, the drivers would make claims against their insurance companies and the insurance companies would resolve liability with each other, including damages for pain and suffering. Insurance companies might contract to pre-settle such claims, thus eliminating court proceedings.

The same kind of exchange might occur for the right to recover damages from injuries caused by medical malpractice. Specifically, the patient could transfer his right to recover damages for medical malpractice to his insurance company in exchange for lower premiums, and the insurance company could resell the right to the patient's doctors or their insurers. Similarly, consumers

who purchase insurance could transfer to the insurance company their rights to recover damages from injuries caused by defective products, and the consumer's insurance company could then deal with the manufacturer's insurance company.

Will markets for liability rights increase or decrease litigation in aggregate? Sale of liability rights to law firms and other specialists should lower the cost of asserting legal, thus tending to produce more litigation. Another force, however, works in the opposite direction and reduces litigation. Recall that the purchase of liability rights by injurers extinguishing legal claims before they arise. Similarly, the purchase of liability rights by insurance companies results in more settlements and fewer trials. On balance, markets for liability rights could increase or decrease litigation. My guess is that bulk transactions in liability rights will reduce litigation on balance, and small transactions might have the opposite effect. In either case, the change should favor efficiency by moving liability rights to the parties who value them the most.

Juries can cause inefficiencies in the legal process. Ruben has shown that juries are subjected to cognitive biases when thinking about risk that result in excessive awards (Rubin 1997). Strong evidence exists that juries treat novel risks far more harshly than familiar risks, thus creating a bias against innovation (Huber 1988). Markets for liability rights could displace disputes from the purview of juries. Parties paid to assume immature liability could contract with the buyers of immature claims for alternative dispute resolution. The preceding discussion of dealings between insurance companies provides an example.

To illustrate, assume that consumers do not study their medical insurance contracts, so the courts withhold enforcement of clauses stipulating compulsory arbitration of medical malpractice claims. A competitive market could solve the problem. Specifically, companies such as law firms might compete to buy the unmaturing medical malpractice claims of consumers. In exchange for a fee paid by the health maintenance organization, the lawyers who own the liability rights might agree to submit any claims that mature to compulsory arbitration .

The high cost of asserting and defending claims also provides a reason why attorneys may value liability rights more than potential plaintiffs. For example, the transaction costs loom large in most class action suits. Macey and Miller have advocated that judges auction the rights to pursue class actions, with lawyers bidding against each other in open competition (**Macey and Miller 1991; Macey and Miller 1993; Thomas and Hansen 1992**). This process would create a market for maturing class action rights.

A vigorous market for liability rights requires the full participation of lawyers, who know best how to value legal claims. The champerty rules inhibit or prevent such participation, thus removing a powerful means of monitoring risks created by manufacturers. For example, suppose that a law firm identifies an obscure product that causes a small injury to many people. Under existing law, the law firm cannot purchase the liability rights from potential victims. Instead, the law in the US must rely upon the class action, which protects individuals according to the court's sense of justice. Alternatively, markets for liability rights would afford individuals the protection of competition.

The prohibition on champerty allegedly protects the ignorant public against swindles by knowledgeable lawyers. In fact, the prohibition on champerty also restricts the ways that lawyers can compete with each other (**Painter 1995**). For example, the prohibition prevents an accident victim from auctioning his liability rights to the lawyer who bids the most. A very different set of regulations from those that we observe would be developed if the aim were to lubricate the market for liability rights and increase competition among lawyers.

### Consent

Why do modern courts prohibit or restrict contracts to waive, disclaim, or modify liability of producers to consumers? Unequal bargaining power supplied one rationale. Game theory, however, contains no support for the proposition that refusing to enforce a bargain benefits the weaker party to it. Furthermore, competition can cure the problem of unequal bargaining power by eliminating everyone's bargaining power. If the real problem were bargaining power, the first solution is increasing competition.

Adhesion contracts supplied another rationale for these prohibitions and restrictions. In light of modern economics, the phrase "adhesion contract" seems far too broad and misleading to provide a useful guide to the law.<sup>9</sup> A modern legal discussion analyzes form contracts as one aspect of markets with asymmetrical information (Koetz 1997). The economics of information

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<sup>9</sup> The original paper on adhesion contracts seems utterly irrelevant to a modern understanding of markets (Kessler 1943).

recognizes that form contracts often benefit both parties by reducing transactions costs.

The best rationale for disallowing contracts for liability rights concerns asymmetrical information. A person who does not know the quality of a product cannot value it correctly. Similarly, a person who does not know the probability and magnitude of a loss cannot value it correctly. Cognitive psychology has supplied new evidence demonstrating large errors in perceiving and thinking about risk. An ignorant person may sell a claim at less than its value, and an ignorant person may pay more than the cost of liability for someone else to assume it. So asymmetrical information can cause markets for liability rights to fail.

If competition drives the price of liability rights to their value, however, ignorant individuals can transact in these markets without making mistakes. An ignorant person who sells a liability right at competitive prices receives full value, and a person who pays a competitive price for someone to assume liability gets insurance at its true cost.

To illustrate by analogy, consider a competitive market for fire insurance. Most homeowners know little about the probability of a fire. Competition among insurers, however, equates the insurance premium with the expected value of claims plus administrative costs. Consequently, every consumer can be ignorant of probabilities and magnitudes of losses, and yet all consumers who pay the competitive price for insurance receive it at cost. Instead of concentrating on collecting information about probabilities, consumers can concentrate on

collecting information about prices. This proposition about fire insurance also applies to insurance against illness, disability, or lost wages.

A competitive market for liability rights would work the same way. To illustrate, assume that a consumer wishes to sell unmatured liability claims for pain and suffering. A competitive market would price the claims roughly at the expected judgment discounted by the probability of an accident. Thus an ignorant consumer, who knows nothing about the probability or magnitude of accidents, would receive full value for unmatured claims. Instead of trying to learn about probabilities, most rational individuals would focus on learning about the prices of liability rights.

Consider how this argument applies to the assumption of risk by consumers of potentially defective products. Costly consumer products such as automobiles are very complex. A rational consumer knows little or nothing about the probability that, say, an accident will cause the gas tank to explode. Assume that the consumer, who buys comprehensive insurance against economic losses, wants to sell his right to recover in tort from the injurer. The law blocks such a transaction on the rationale that the consumer is ignorant about the transaction's value. If the market is competitive, however, all the consumer needs to know is the market price. One participant in the market might be the automobile manufacturer, who seeks to extinguish liability by purchasing unmatured liability rights. Another participant in the market might be law firms that specialize in torts. If the manufacturer offered to pay less than the value of the liability right, the law firm would outbid the manufacturer. So competition



between the manufacturer and law firms would guarantee that the consumer receives full value for selling the unmatured claim.

To illustrate the power of competition to convey information, assume that a manufacturer offers two cars, each with the gas tank in a different place. For one car, the seller will give me \$50 off the price for waiving all rights to recover in pain and suffering; for the other car the manufacturer offers \$100 off the price for waiving these rights. The difference in price reduces complex technical information about a serious risk to terms easily understood.

### Goals of Liability Law

Objectives conventionally attributed to liability law by courts include deterrence, insurance, low transaction costs, compensation, and fairness. I have explained how markets for liability rights can produce optimal deterrence, optimal insurance, and low transaction costs. Now I briefly discuss the goals of compensation and fairness.

As explained above, a liability rule requiring perfect compensation causes the injurer to insure the victim fully. Potential victims who sell liability rights cannot obtain compensation from the injurer. Some potential victims will sell liability rights and buy insurance, thus substituting an insurance claim for a court judgment. Substituting insurance for a court judgment seems unobjectionable.

Some potential victims, however, will sell liability rights and buy little or no insurance. The resulting exposure to risk may seem objectionable. Courts may try to undo the sale of liability rights out of sympathy for the victim.

Sometimes this sympathy is misplaced. For example, assume that a potential victim believes that pain does not increase the marginal utility of money. Since he does not want insurance against pain, he sells his liability right to damages for pain. After he suffers a painful accident caused by someone else, a sympathetic court may want to unravel the sale of his liability right and compensate him. If the court kept in mind that pain does not increase the need for money, the court might recognize that this impulse to compensate is misplaced.

In other circumstances, however, sympathy with the victim has a firmer foundation. For example, assume that a potential victim sells his right to recover damages for hospitalization and then fails to obtain medical insurance due to imprudence. After he suffers high medical costs due to an accident caused by someone else, a sympathetic court may want to unravel the sale of his liability right and compensate him.

An obvious remedy comes to mind: Courts might allow sales of unmatured liability rights by people with insurance, and disallow such sales by people without insurance. Such a rule would cause the buyers of unmatured liability rights to demand proof of insurance as a condition for purchase. Without such proof, the purchaser would risk having the court unwind the transaction.

In any case, compulsory insurance through the liability system is not a good way to address medical needs. People need medical insurance regardless of the cause of hospitalization. Obstructing markets for liability rights provides compulsory medical insurance for harms whose cause triggers liability, but not

for harms with other causes. People who want accident victims assured of medical treatment should work towards a more comprehensive solution than closing markets for liability rights.

Now I turn to the issue of fair exchange. Fair exchange can be defined as exchanging items of equal value (Gordley 1981). Unfair exchange typically occurs because one party does not know the value of an item being traded. In perfectly competitive markets, everyone is a price taker, so competitive exchange is always fair. Courts are troubled by the potential unfairness of selling liability rights when one party is relatively ignorant. Competition would assure fair prices in markets for liability rights by reducing the scope for bargaining.

#### Conclusion

According to the Coase Theorem, exchange at zero transactions costs allocates liability rights efficiently, regardless of the initial allocation by law. According to general equilibrium theory, exchange in a complete set of perfectly competitive markets allocates liability rights efficiently, regardless of the initial allocation by law. The Coase Theorem and the model of perfect competition disagree concerning the cause of efficient exchange. In the Coase Theorem bargaining produces efficient resource allocation, whereas transaction costs cause inefficiency. In the model of perfect competition, however, competition produces efficient resource allocation by eliminating bargaining and turning

everyone into a price-taker. (Game theory, fortunately, raises the disagreement over market power and transaction costs to another level of sophistication.<sup>10</sup>)

Law and economics scholars usually use the Coase Theorem in studying contracts and property law, and they often use competitive models in studying antitrust law and regulated industries. In the case of liability rights, however, I find the perspective of competitive markets especially useful. I believe that the absence of a competitive market for liability rights causes many of the problems of the tort system, and commodifying liability is the solution.

Regarding liability rights as contingent claims invites an extension of general equilibrium theory to liability law, which could change law in theory and practice. The extension could replace intuition in legal theory with rigor and bring a new perspective to regulating risks. Besides justifying competition on grounds of efficiency, the model of perfect competition diagnoses failed markets. Markets fail when their actual structure diverges too far from the ideal of perfect competition (Bator 1958) (Breyer 1982); (Schultze 1977). Applied to law, this perspective requires lawmakers to facilitate the exchange of liability rights.

Understanding regulation requires a theory of the state. Economists developed theories of the state that could be applied to regulation (Arrow 1963; Buchanan and Tullock 1962 (1967); Downs 1957; Farquharson 1969; Mueller 1979; Olson 1965; Riker 1962; Shepsle and Bonchek 1997; Stigler 1988).

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10 Numerous games yield efficiency without competition, thus contradicting the spirit of general equilibrium theory. Numerous games yield inefficiency with low bargaining costs, thus contradicting the spirit of the Coase Theorem. In game theory, strategic behavior bears so little resemblance to other costs that labeling strategy as “transaction costs” obscures more than it clarifies.

According to the economic theory of the state, a good regulation withstands the corrosive influence of self-seeking politicians and bureaucrats.

Taken together, the model of perfect competition and economic theories of the state supply an abstract framework for analyzing regulations. According to this framework, a market that approximates perfect competition should remain unregulated. This principle discredits many regulations that restrict competition for political ends. To make the case for regulation, proof of market failure is necessary, but not sufficient. A complete case also requires proving that a regulatory remedy can succeed against the self-serving strategies of politicians and state officials (Niskanen 1975; Stigler 1972; Stigler 1975) .

Since law typically prohibits markets for liability rights, no one knows how they would work. Nevertheless, I try to imagine the consequences of marketing liability rights. If liability rights could be unbundled and repackaged, perhaps the volume of sales would sustain competition. Competitive sales would help solve the problems of combining deterrence and insurance, moving liability to the lowest cost insurer, lowering transaction cost of dispute resolution, and improving the quality of consent to disclaimers and waivers of liability. The success of such markets would depend upon the ability of entrepreneurs to develop new contingent commodities. Large, unrealized surpluses from such exchanges, if they exist, will create pressures to liberalize markets for liability rights.

To lubricate competition, lawmakers or courts could adopt the presumption that a contract to transfer a liability right is enforceable when exchange occurs in a competitive market. For example, a contract to waive,

disclaim, or assume risk would be enforceable whenever several buyers or sellers bid for it in an arms-length transaction. If markets were allowed by law, the emergence of competition would depend upon the creativity of entrepreneurs. Entrepreneurs would need to create new commodities by unbundling, packaging, and reselling liability rights. Effective competition requires reducing liability rights to commodities in wholesale transactions. The first step is a new understanding and attitude in the courts that frees entrepreneurs to create new markets for contingent claims.

The market for unmatured liability rights may seem impractical and visionary. Until recently, however, proposals by economists for a market in pollution rights seemed impractical and visionary. The initial hostility of environmentalists and industry to pollution rights eroded as environmentalist saw an opportunity to obtain a cleaner environment by reducing the cost of abatement, and industries saw an opportunity to obtain valuable rights while reducing the burden of regulation.

Liability rights might repeat the history of pollution rights. Trial lawyers might see buying liability rights from consumers as a profitable extension of contingent fee litigation. Consumer advocates might see consumer sales of liability rights to lawyers as a way to improve consumer protection by policing industry more vigorously. Manufacturers might see the purchase of liability rights as an effective means of limiting their liability and reducing the burden of suits with little merit. Insurance companies might see the exchange of liability rights as an opportunity to save transaction costs and reduce their exposure by pre-

settling claims. Because exchange creates a surplus, each of these groups may be right. of each group may be accurate.

### Appendix: Pricing Liability

In this appendix, I will compute the competitive price of a mature liability right first, and then I will compute the price of an unmature liability right. I defined a liability right as the right of a victim to receive damages from the injurer in the event that possible harm actually occurs. Let  $j$  denote possible damages awarded at judgment after trial of a mature liability right. Let  $p(j)$  denote the probability of that a trial results in  $j$ . Thus the expected judgment, denoted  $EJ$ , is given by the equation

$$EJ = \int p(j)j dj.$$

Given rational expectations, the plaintiff expects to gain  $EJ$  at judgment after trial and the defendant expects to lose  $EJ$ . Furthermore, the plaintiff and defendant expect to bear trial costs denoted  $t_p$  and  $t_d$ , respectively.

Instead of proceeding to trial, the parties might settle their dispute for an amount  $S$ , in which case the plaintiff receives  $S$  and the defendant pays  $S$ . In addition, the plaintiff and defendant must bear transaction costs of settling, denoted  $s_p$  and  $s_d$ , respectively.

Let  $q$  denote the probability that the parties settle the dispute, so  $1-q$  indicates the probability of a trial. Thus the value of the plaintiff's legal claim equals the probability-weighted value of settlement and trial, and likewise for the defendant:

$$\begin{aligned}\text{value of plaintiff's claim} &= q(S-s_p) + (1-q)(EJ-t_p) \\ \text{value of defendant's liability} &= q(-S-s_d) + (1-q)(-EJ-t_d).\end{aligned}$$

I assume no legal impediments to the plaintiff selling his claim or to the defendant paying someone to assume liability. Thus I assume that entrepreneurs can freely unbundle and repackage liability rights. In a perfectly competitive market, competition would bid the price of a plaintiff's mature claim to its value, and competition would bid the cost of assuming the defendant's liability to its value. Thus the preceding equations characterize the competitive equilibrium prices for the plaintiff's mature claim and the defendant's mature liability. (For the sake of simplicity, these formulae omit some elements required for a complete account, such as the cost of filing a legal complaint and the cost of discovery.<sup>11)</sup>

Now I turn to the competitive price of *unmature* liability rights. Let  $r$  denote the probability of an accident that triggers the injurer's liability to the victim. To obtain the competitive price of the unmature claim, the value of the mature claim must be discounted by the probability  $r$  that it matures:

$$\begin{aligned}\text{(1) competitive price of plaintiff's unmature claim} &= r[q(S-s_p) + (1-q)(EJ-t_p)] \\ \text{(2) competitive price of defendant's unmature liability} &= r[q(-S-s_d) + (1-q)(-EJ-t_d)].\end{aligned}$$

To obtain more precise and revealing equations, I will use the Nash bargaining solution to solve for  $S$  in equations (1) and (2). The Nash bargaining solution requires specifying the threat values of the parties, the cooperative value of the game, and the cooperative value of the game.



In settlement bargaining, the plaintiff's threat value equals the amount he expects to gain on his own without defendant's cooperation:

$$p's \text{ threat value} = EJ - t_p.$$

Similarly, in settlement bargaining, the defendant's threat value equals the amount he expects to lose without plaintiff's cooperation:

$$d's \text{ threat value} = -EJ - t_d.$$

The game's non-cooperative value equals the sum of the threat values:

$$\begin{aligned} \text{non-cooperative value of game} &= EJ - EJ - t_p - t_d \\ &= -t_p - t_d. \end{aligned}$$

Thus the non-cooperative value of the settlement game equals the sum of the trial costs.

Now I turn from non-cooperation to cooperation. The game's cooperative value equals the value of the settlement to the parties minus the settlement costs to the plaintiff  $s_p$  and defendant  $s_d$ :

$$\begin{aligned} \text{cooperative value of game} &= +S - S - s_p - s_d \\ &= -s_p - s_d. \end{aligned}$$

Thus the cooperative value of the settlement game equals the sum of the settlement costs.

Finally, the surplus from cooperation equals the difference between the game's cooperative value and its non-cooperative value, which reduces to the savings in transaction cost from avoiding a trial:

$$\text{cooperative surplus from settlement} = (t_p + t_d) - (s_p + s_d).$$

The Nash bargaining solution gives each party its threat value plus half of the surplus from cooperation:<sup>12</sup>

$$\begin{aligned} \text{Nash payoff for plaintiff} &= S - s_p = EJ - t_p + .5[(t_p + t_d) - (s_p + s_d)] \\ \text{Nash payoff for defendant} &= -S - s_d = -EJ - t_d + .5[(t_p + t_d) - (s_p + s_d)]. \end{aligned}$$

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<sup>11</sup> The formula is extended in Chapter 10 of (Cooter and Ulen 1996).

<sup>12</sup> (Luce and Raiffa 1967; Nash 1950; Rubinstein 1982; Rubinstein 1995).

An important consequence of this formula is that parties with symmetrical transaction costs will settle for the expected judgment:

$$t_p = t_d \text{ and } s_p = s_d \quad \Rightarrow \quad S = EJ.$$

Consequently, symmetry between plaintiff and defendant results in the following competitive prices for liability rights:

symmetrical transaction costs  $\Rightarrow$

(3) competitive price of plaintiff's unmature claim

$$= r[EJ - (qs_p + (1-q)(t_p))]$$

(4) competitive price of defendant's unmature liability

$$= r[-EJ - (qs_d + (1-q)(t_d))].$$

According to equations (3) and (4), the price of an unmature claim equals the difference between the expected value of the judgment and transaction costs, discounted by the probability of an accident. Thus equations (3) and (4) provide a useful benchmark for thinking about markets for liability rights. In the simplest case where settlement approaches certainty ( $q$  approaches 1) and settlement costs approach zero ( $s_p$  and  $s_d$  approach 0), the prices approach  $rEJ$  and  $-rEJ$ , respectively. (The simplest case has attractive features of cost-internalization that I discuss elsewhere.<sup>13</sup>)

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<sup>13</sup> See (Cooter 1989) and (Cooter and Rubinfeld 1994).

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