

Property Rules versus Liability Rules

1. The classic paper on this topic is by G. Calabresi and A.D. Melamed (Harvard Law Review, 1972 pp. 1089 - 1128). The authors note that the first issue a legal system must deal with is the problem of "entitlement". When there is a conflict between two or more parties the state has to decide whether a person has a right to make noise or to smoke or whether the other person has the right to silence and a smokeless room. Having made the choice society must enforce that right. To do this a minimum of state intervention is necessary.
2. They consider three types of entitlements: (1) entitlements protected by property rules, (2) those protected by liability rules and (3) those which are inalienable entitlements.

Under a property rule a person who wishes to remove the entitlement from the owner must do so in a voluntary transaction in which the value of the entitlement is agreed upon by the seller. He the state decides the entitlement but not its value. This entitlement gives rise to the least amount of state intervention.

Under a liability rule I can destroy the initial entitlement by paying an objectively determined value for it. Liability rules involve an additional stage of state intervention. Not only are entitlements protected but their transfer or destruction is allowed on the basis of a value determined by an organ of the state rather than by the parties themselves.

An entitlement is inalienable to the extent that its transfer is not permitted between a willing buyer and a willing seller. The state determines who is initially entitled and determines the compensation that must be paid if the entitlement is destroyed or taken but it forbids its sale under some or other circumstances. Thus, I am entitled to the fruits of my labor and if you cause me injury so that my earning capacity is decreased you will be liable for damages. But I cannot capitalize my earning power by selling myself into slavery, nor can I sell one of my kidneys as a transplant. I have the right to vote but I can't sell that vote. I have an entitlement to a piece of land in the middle of a city but the entitlement maybe restricted by the building code and density limitations imposed by land use regulations. Similarly, if I own a historically valuable property I can't tear it down to build a shopping mall.

The authors go on to explore two primary questions: (1) In what circumstances should we grant a particular entitlement? (2) Should we protect that entitlement by using a property liability or inalienability rule?

Economic efficiency or Pareto optimality is one considering in the setting of entitlements. Administrative costs of enforcement are one aspect of efficiency.

The Coase theorem is the argument that on certain assumptions usually termed the absence of transaction costs, Pareto optimality will occur regardless of initial entitlements. The zero transaction cost assumption must be understood extremely broadly as involving both perfect knowledge and the absence of any impediments or costs of negotiation. The assumption is a useful starting point similar to the assumption of no friction in physics.

Once "friction" or transaction costs are introduced the authors introduce the following guidelines: (1) economic efficiency standing alone would dictate that set of entitlements which favors knowledgeable choices between social benefits and social costs of obtaining them and between social costs and the social cost of avoiding them. (2) This implies, under uncertainty that the cost should be imposed on the party best located to make such a cost-benefit analysis. (3) In a specific contexts such as accidents this suggest putting costs on the party that can most clearly avoid them. (4) Under uncertainty the costs should be imposed on the party with the lowest transaction costs to correct an error in entitlements by inducing the party who can avoid social costs most cheaply to do so. (5) As there transaction costs a decision will often have to be made on whether market transactions or collective fiat is most likely to bring us closer to economic efficiency.

Distributional goals. The choice of entitlements also involves concerns over the distribution of wealth and the distribution of certain specific goods.

As it is very difficult to imagine a society in which there is a complete equality of wealth, the entitlement a society decides to sell, and which it decides to give away will depend in part on which promotes the wealth distribution that society favors.

Whenever a society wishes to maximize the chances that individuals will have a minimum endowment of certain goods — education, medical care, bodily integrity — the society is likely to begin by giving the individuals and entitlement to them. If the society deems such an entitlement to be essential regardless of what the individual desires, it will make the entitlement inalienable. But by endowing individuals with specific goods rather than money society indicates it can decide better than the individuals what benefits them and society.

The authors point out that society protects values protected by the entitlement to be free from gratuitous or unnecessary beatings. Given this value in deciding between the relative worthiness of silence lovers and noisy lovers the authors argue that the entitlement to silence strengthens the entitlement to be free from unnecessary beatings. By reinforcing this value it reduces the number of discriminations people must make between one activity and another, thus simplifying the task of obedience.

Property Rules versus Liability Rules

One key question is why do we need liability rules at all? The authors give three reasons:

- (a) eminent domain or the hold out problem.
- (b) the free rider problem (a large group problem)
- (c) accident situations in which the accident — automobile or environmental "just happens" and the injurer and the victim are not known to one another before the occurrence. So they cannot bargain or write contracts with one another.

Rules of inalienability.

Restrictions on the sales of certain entitlements maybe justified on grounds of enforcement or because of problems of obtaining information on external costs. For example restrictions are imposed on sales of land to polluters or even commercial establishments in residential neighborhoods. Restrictions are imposed on the construction of houses on land close to airports or in wilderness areas. In some wilderness areas the construction of roads is limited. The sale of kidneys or parts of a person's liver is prohibited as society is concerned that uninformed poor persons will make up most of the sellers. Also there is the concern that by monetizing the

transaction the number of organs donated for humanitarian reasons will decrease. But the essential reasons for inalienable entitlements are self-paternalism and true paternalism.

Under self-paternalism society will pass a bill of rights so that they will be prevented from yielding to momentary temptations which are harmful to one's self. They will pass balanced budget amendments to restrict the level of government expenditures.

Under true paternalism restrictions are imposed on the reading pornography, smoking, drinking, and a wider range of other social practices.

The Framework of Entitlements and Pollution Control Rules

Here the main points are a reiteration that the choice of entitlement and choice of the protection rule will depend in part on: (1) who is best able to deal with the problems and (2) the complications related to the size of the group (the hold out problem or the free-rider problem).

The Framework and Criminal Sanctions

Why not convert all property rules to liability rules? The authors claim is that the answer is obvious. Liability rules represent only an approximation of the value of the object to the owner. So it is very difficult to make judgements whether the thief values the object more than an owner. If this is true of property it is even more so with bodily integrity. Are we collectively and objectively valuing the cost of a rape or assault to the victim? Bodily integrity is an area where we do not let the entitlement be sold at all and economic efficiency enters, if at all, in a more complex way.

The thief not only harms the victim, he undermines rules and destruction of significance beyond the specific case.

Kaplow and Shavell (K-S henceforth)

These two authors have recently carried out an economic analysis of Property Rules versus Liability Rules (Harvard Law Review 1996, 715-790). They note that the pattern of legal protection is to use property rules to guarantee possessors interest (property right in automobiles, houses and so forth) — and the frequent, though not exclusive use of liability rules to protect against harmful externalities.

Harmful externalities

Under a property rule the entitlement is absolute. Under a liability rule the injurer can cause harm but must compensate the victim or the courts best estimate of it.

Parties Cannot Bargain with one Another

A single injurer and a single victim.

1. State's Information Perfect

In this case property rule (PR) and liability rule (LR) are equivalent because under each the optimal outcome is achieved.

2. State's Information Imperfect

Suppose the state knows the victim's harm but does not know the prevention cost.

Suppose the harm is \$1000 but the state does not know whether the prevention cost is \$800 or \$1200. Inevitably the state will make mistakes. One case is when the victim is given the entitlement so the injurer spends \$1200 even though the harm is only \$1000.

Under the liability rule the socially optimal outcome will always occur. When the prevention cost is \$800 it will be undertaken when it is \$1200 the injurer will compensate

the victim. The virtue of the liability is that it allows the state to harness the information the injurer naturally possesses about his prevention cost.

This case generalizes to the case where the state's information about harm as well as prevention cost is imperfect. As long as the state's estimate of the average level of harm is what is observed. For example if damages are set at \$1000 there are three best estimate of harm —500, 1000 and 1500 — when the prevention cost is \$800 (on average \$200 is saved by preventing harm). Under a property rule the outcomes will involve greater social cost on average. When the prevention cost is \$1200 the injurer will undertake the prevention even though the average harm is only \$1000.

Concerns about the use of Liability Rules

(a) The possibility that the difficult of estimating harm favors property rule protection of victims. If we do not know whether the pollution causes a rash or cancer should we be conservative and insist on clean air? The authors argue that this argument overlooks the fact that if the risk of cancer is serious the damages will be high as the average harm is high.

Although a property rule may appear to be a virtue as courts will not have to estimate harm this argument is false. It ignores that the court must make an estimate of cost in assigning the property rule.

The use of rough estimates of harm under a liability rule should not be disturbing as property rules can be understood as liability rules that use inferior estimates. Recall that under a property rule the court implicitly sets damages either to zero (when injurers can pollute freely or infinitely) when the rules protect victims.

Parties Bargain with Each other

If bargaining is successful the choice between property and liability rules should diminish in importance because if the rule chosen would lead to a sub-optimal result, the parties could in principle make a mutually desirable agreement incorporating the optimal result, harm or no harm, as the case maybe. The observation is an application of the Coase Theorem.

Victims Behavior

When victims can undertake actions that can mitigate or avoid the damages-liability rules become less attractive as the incentives for victims to take care will be reduced.