



Some Aspects of Property Rights

Author(s): Harold Demsetz

Source: *Journal of Law and Economics*, Vol. 9, (Oct., 1966), pp. 61-70

Published by: The University of Chicago Press

Stable URL: <http://www.jstor.org/stable/724993>

Accessed: 05/05/2008 21:47

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=ucpress>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We enable the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.

SOME ASPECTS OF PROPERTY RIGHTS*

HAROLD DEMSETZ

University of Chicago

THE tradition in microeconomic theory is to take wants and technology as givens and to proceed from these to deduce from the assumption of scarcity testable implications and normative propositions. These assumptions, together with variety in tastes and abilities and differences in the number of rivals, give rise to most economic laws. In this way, laws such as those that relate to demand, comparative advantage, equalization of factor returns, and the relationship of price to cost are deduced. The role of property rights is not explicitly dealt with in this approach. But imbedded in the whole process is a third class of given datum. There must be assumed a set of social arrangements which define ownership. In this paper, I will examine some aspects of property rights that bear both on issues to which we have been led by the traditional approach and to some which we have ignored because property rights have not been treated explicitly.

An example will make clear the necessity of assumptions about social arrangements. Consider the two economic laws which state that (1) demand curves are negatively sloped and that (2) queues will tend to be eliminated by a price that is free to fluctuate. The first law is true even if ownership does not include the right to buy or sell; it does not even depend on the existence of exchange. Thus, from the first law it follows that an increase in the unpleasantness of my neighbor (an increase in the price of association) will diminish the frequency of my visits. Nothing is bought or sold but the law holds true.

The second law holds true generally only when the right to sell is included in ownership. And this is so for nontautological reasons. Queues usually do exist for the use of public parking at zoos, beaches, etc., on popular holidays when no freely fluctuating price is charged for the use of facilities. Of course, the trouble and delay associated with waiting for parking will limit the length of queue and the hotter the day the shorter the queue will tend to be; this is a reflection of the law of negatively sloped demand. But the queue, which can be either of demanders or suppliers, is not generally reduced to insignificance by the heat of the day. And therein lies a difference between

*The author wishes to thank the Lilly Endowment for financing his work for several weeks at the University of California at Los Angeles through a grant to that institution for the study of property rights.

the economic laws that prevail when ownership includes right of sale and when it does not. When sale is included, the price will *tend* to rise and the length of queue will *tend* to be reduced. Self-interest and the relatively small cost of most price adjustments assure this.

Methods other than relying on the heat of the day or on the height of price can be used to reduce queues. Entry into public parking places can be made more or less difficult; directions on how to get there can be hidden from sight or placed in prominent positions, etc. These methods are generally more costly to employ and no one has a clear self-interest in employing them. Consequently, according to the first law, they are employed to a lesser degree than flexible pricing. Therefore, queues can be expected to be more significant where the right of sale is not included in ownership.

A private property system is difficult to define in a few words, and I shall not attempt a complete definition here. Crucially involved is the notion that individuals have control over the use to which scarce resources (including ideas) can be put, and that this right of control is saleable or transferable. A private property right system requires the prior consent of "owners" before their property can be affected by others. The role of the body politic in this system is twofold. Firstly, the government or courts must help decide which individuals possess what property rights and, therefore, who has the power to claim that his rights are affected by others. Secondly, property rights so assigned must be protected by the police power of the state or the owners must be allowed to protect property rights themselves. Presumably the best mix of public and private protection will depend on ethical and other considerations.

There are three important implications of a private property system that are valid in a world in which all property rights are assigned and in which the cost of exchanging and of policing property rights are zero. A private property system under such conditions, implies that (1) the value of all harmful and beneficial effects of alternative uses of property rights will be brought to bear on their owners, (2) to the extent that owners of property rights are utility maximizers, property rights will be used efficiently, and (3) the mix of output that is produced will be independent of the distribution of property rights among persons except insofar as changes in the distribution of wealth affect demand patterns.

These implications follow directly from the recent work of R. H. Coase.¹ We will not derive them in detail here, but the nature of the forces which produce them can be grasped easily by way of example. Whether or not a new product will be profitable is, in the absence of exchange and police

¹ See Coase, The Problem of Social Cost, 3 J. Law & Econ. 1 (1960).

costs, independent of which of the following property right assignments is chosen:

(A) Producers of new products are assigned the right to sell new products without compensating competitors who are injured.

(B) Producers of old products are assigned the right to retain their customers.

Under right assignment (A), injured producers of old products will need to bear the cost imposed upon them by the introduction of new products, but they will be able to bring this cost to the attention of new product producers by offering to pay them to withdraw the new products. Competitors will be willing to pay a sum up to the amount which measures the harmful effects visited upon them. They can do this by offering such a sum to the new product producer to withdraw his product or, what is more likely, they can offer such a sum to buyers in the form of price cuts in order to retain their patronage. If the cost imposed on injured producers of old products is greater than the gain conferred on buyers by the new product, the injured competitors will be able to retain their customers and the new product will fail. If the gain conferred on buyers by the new product exceeds the cost imposed on producers of old products, the new product will succeed.

Under right assignment (B), the new product producers will need to pay an acceptable sum to producers of old products before buyers can shift to the new product. The amount which old product producers will find acceptable will be a sum no smaller than the value of the harmful effects of losing customers. The sum that producers of old products will accept under right assignment (B) is precisely the same as the sum they pay under right assignment (A). If this sum exceeds the gains that buyers would enjoy from the new product, the new product will be withdrawn. Given the gains and the costs generated by the new product, the profitability of producing it will be the same under either and any system of completely specified property rights.

Since all costs and gains of exercising property rights are brought to bear on property owners no matter what right assignment is adopted, the output mix will remain invariant with respect to the property right system used, provided only that all rights are assigned. This result should not be too surprising; it states that in the absence of exchange and police costs property rights will always be used where they assume their maximum value. This is a standard proposition of economics with regard to any economic resource. The property right in our example is the right to produce a new product. Whether this right is initially owned by new product producers or by their competitors, it will end up being owned by that party which will find it more valuable. Who this party is will be independent of the initial right assignment.

Although the proposition that property rights will find their most valuable use turns out to be a standard deduction from economic theory, it is a very important variant. It calls to our attention the possibility that the solution of many problems may be arrived at by a more complete specification of property rights.

Our conclusions do *not* depend on the degree of competitiveness. In the absence of exchange and policing costs all monopolists could discriminate freely or could be paid by purchasers of their products to act competitively. Exchange surplus would, of course, accrue to the monopolists.

A world without exchange or police costs can only be a starting point for analyzing the implications of alternative property right systems. Where such costs are positive, alternative assignments of property rights will generally imply different mixes of output. I am unable at present to specify the procedure that should be followed for the assignment of property rights, but I wish to call attention to some characteristics that will have an important bearing on the choice of such a procedure. I shall call these characteristics *valuation costs* and *realignment costs*.

Valuation costs. The efficiency with which property rights are used depends on whether their value in the use to which they are put is sufficient to cover the cost of foregoing alternative uses. However, for most uses of property rights only some beneficial and harmful effects are easily known. Other effects can be discovered only with great cost. Most of the harmful effects imposed on workers and on the suppliers of many inputs can be known beforehand with little cost. A property right system which requires the *prior* agreement of these input owners before they can be put to a particular task insures that these costs will be taken into account. But the inputs upon which smoke from the factory will eventually descend, such as distant farmland (and these are inputs in every sense of the word), can be known only with great cost.

While it is difficult to draw a neat line, it is clear that as the uncertainty increases about whose rights will be affected and by how much, a point will be reached beyond which the expected cost of a prior determining of effects exceeds the expected gain. The greater the uncertainty of effect, the less inclined we should be to require that prior compensation be paid to those harmed or prior fees be charged of those benefited. The cost of sorting out and measuring legitimate claims in cases of great uncertainty would be so high as to undermine efficient resource use. Property right uses which, with omniscience, would be known to be profitable, would be discouraged by the imposition of such costs in the presence of uncertainty. Innovation and change would be uneconomically hampered by a commitment to a policy of prior compensation.

Denial of prior compensation when those who will be affected are known

with a fair degree of accuracy, however, would also be inefficient. For in these instances, the most economical way to measure accurately the costs and benefits of a given use of property rights is to insist on the right to prior compensation for accepting a harmful effect or on prior payment for delivering a beneficial effect. The right to prior compensation implies the right to insist on *voluntary* consent, and insisting on voluntary consent tends to produce information accuracy when many costs and benefits are known only by the individuals affected.

The requirement of prior compensation if those affected can be ascertained easily and the denial of prior compensation when those affected can be identified only with great difficulty does not deny the efficiency of requiring compensation in many of the uncertain cases *after the fact*. The cost of acquiring information will be lowered after property rights have been put to a particular use, so that assessment of effects may become sufficiently easier in some instances to make the payment of compensation economic.

It is difficult to define boundary lines for prior as compared with after-the-fact compensation, but sometimes it is possible to assign rights in a way that reduces valuation costs. A clear prescription seems to stand in one important case—pecuniary effects. We have discussed above two alternative assignments of rights and argued that they would have the same effect on resource allocation if exchange and police costs were zero. The example involved compensation for pecuniary effects and whether a new product producer should compensate competitors for taking away customers. Once we recognize the cost of discovering and accrediting claims, a difference between the two right assignments emerges.

Damaged competitors know they are losing customers and they can reflect the cost imposed on them by offering customers lower prices. They do not need to know who is taking customers from them and the costs of establishing such knowledge is rendered unnecessary. If, alternatively, we should give competitors the right to their customers, prior compensation would need to be paid by a new entrant before he could engage in business. The cost of establishing which firms are damaged and by how much would be so great as to discourage entry even though entry would have been profitable had there been no problem of resolving uncertainty. It follows from efficiency requirements that persons and firms be given the right to compete without compensating those who are financially damaged. Those who are harmed by competition can voluntarily bid to retain customers. In some cases the harmful effects may be so obvious that prior compensation to a competitor would not affect resource allocation. Such cases are very unlikely where the effects stem from the loss or gain of buyers but are more likely where they result from physical damage.

Realignment costs. Alternative assignments of property rights will affect

the resources devoted to exchanging for reasons other than valuation costs. Even if uncertainty in the valuation of resource in alternative employments is taken as given, it will be efficient to assign *new* property rights in a way that is expected to minimize the cost of transacting that will be required subsequently. Given variety in demands and abilities, it is unlikely that a correct initial assignment of rights will eliminate all recontracting, but it may be possible to reduce recontracting costs significantly.

For example, let us consider the property right problems associated with the introduction of home air conditioners. The question arises as to whether homeowners should have the right to prevent noise levels from rising above a given intensity or whether air conditioner owners should have the right to run their sets even though noise levels on surrounding land will be raised. If it is generally true that owners of air conditioners will so strongly desire to operate their sets that they will purchase most of the noise control rights from their neighbors, then exchange costs could be reduced by giving the initial assignment of rights to set owners. If set owners are given these rights, some homeowners will contract to buy them from set owners, but, by assumption, the number and presumably the cost of such exchanges would be less than under the alternative assignment of rights. A number of sets that approximates the efficient number would be arrived at with the use of less resources for conducting exchange if set owners are given the right rather than homeowners.

This prescription for the assignment of property rights is most clearly applicable when these rights are new. The age of air transportation suddenly made the right to traverse upper airspace a valuable right, whereas the airplane merely provided a competing claimant for the already valuable right to use lower airspace. The right to use upper airspace was not clearly defined because a definition was rarely demanded; it could be argued that there was no involuntary taking of property when the right to use upper airspace was assigned to airplane owners and to the government. Since a decision was needed and since it appeared that airplane owners would eventually acquire the right to use upper airspace, an efficient allocation seemed to demand that exchange costs be reduced by initially assigning the new right where it was finally expected to reside. (The assigned right is greatly limited. The right of sale is not generally included with the right of use, so that if other competing claims for the use of upper airspace arise, a reallocation through the courts will be required.)

The right to use (and to sell the use of) lower airspace has been defined rather clearly to reside with landowners. The existence of this definition attests to the fact that landowners do find the right to use lower airspace a valuable right for such purposes as insuring quiet and building high struc-

tures. In the case of lower airspace, we are dealing with the problem of whether or not the right to use or own lower airspace should be involuntarily *reassigned*. The existence of serious competing claims to the use of lower airspace should create doubt about our ability to judge which use is most valuable and, hence, should lead us to rely to a larger extent on voluntary negotiations between competing claimants and landowners.

Should the practice of involuntary reassignment become common, all confidence in the longevity of property rights will be reduced and all long-run consequences of using property rights in various ways will tend to be neglected. Nonetheless, it must be realized that some degree of involuntary reassignment of property rights is desirable if most persons agree to a reassignment that, because of high police or exchange costs, cannot easily take place in the market. Taxing for the provision of national defense is the classic example. The great cost that would be required to confine the benefits of national defense only to those who pay for them (that is, the great cost of preventing nonpayers from "stealing" benefits), is what makes the voluntary exchange of property rights in the production of national defense rather impractical.

However, it is sometimes the case that a public taking of property will benefit one fairly well defined group of persons at the expense of another. Indeed, the compensation principle of welfare economics presumes that it is possible to determine who will be harmed or benefited and by how much. But, in the absence of voluntary exchange of already existing property rights, it is difficult to see how this valuation information is obtained.

Valuation in the absence of voluntarism. Once the property right system has been changed to allow the nonvoluntary taking of property from and for identifiable groups of persons, we can no longer rely on market negotiations to produce valuation information. In some cases, it may be thought that market transactions are too costly to bring about a proper resource allocation and that substituting political machinery for the market will reduce this cost. In such cases the rule now incorporated into much of welfare economics is that, if a change in resource allocation will produce enough benefit so that those who are harmed by the change *could* be compensated adequately, then the change should be made.

Some economists have argued that the compensation need not be paid to those harmed, that such a payment should be viewed as a problem of wealth distribution and not one of efficiency. Others have argued that compensation must be paid so that we can be assured that no one is made worse off by the change. There is, however, a separate reason for the payment of compensation. This reason, which is explained below, is based on strictly interpreted efficiency requirements that arise from the need for

accurate information; it does not rely on the ethical postulate that no person should be left worse off because of a government sponsored change in the *status quo*.

The costs and benefits of a prospective change in resource allocation cannot be treated as given datum. The marginal cost and benefit curves associated with a prospective realignment of resources are not known by the government. Each affected individual knows his benefit or cost, and, in the absence of high exchange cost, this information would be transmitted to others in the form of market negotiations. The primary problem of the government is the estimation problem. The compensation principle by its assumption that costs and benefits are known begs the most difficult question posed by a prospective change.

Our argument can be made without loss of generality by considering a particular activity that harmfully affects some persons while benefiting others. We assume that exchange or police costs are too high for the harmful and beneficial effects of the activity to be brought to bear adequately on participants by private property adjustments. Our problem is illustrated in Figure I where mc_1 and mb_2 measure, respectively, the marginal costs which accrue to group 1 and the marginal benefits which accrue to group 2 for various levels of the prospective action. The ethical symmetry of the problem should be underscored. To allow the action will benefit group 2 and

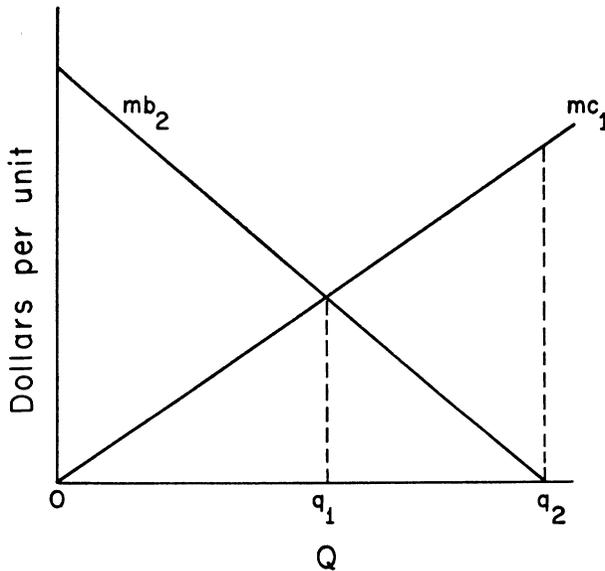


FIGURE I

harm group 1. To disallow the action will benefit group 1 and harm group 2. A neutral ethical position would allow us to portray the situation equally well by reversing the identification of costs and benefits. The marginal cost of curtailing the activity would be the mb_2 curve, and the marginal benefit of curtailing the activity would be the mc_1 curve.

Whichever way one views the problem, the efficient level of the activity in the absence of market or political adjustment costs is q_1 . Given that exchange or police costs are prohibitively high, the marginal cost (marginal benefit) to group 1 cannot be brought to bear on group 2 and the marginal benefit (marginal cost) to group 2 cannot be brought to bear on group 1. Let us suppose that the political costs of adjusting the activity level are low enough to make such an adjustment desirable and, further, so that q_1 remains efficient, let us assume that these political costs are independent of the degree to which the adjustment is made.

If the government should merely question those who alleged that they will be harmed by the activity, it will be in their interest to exaggerate the harmful effects so that they can increase the probability that the activity will be prohibited. Those who allege that they will be harmed if the activity is prohibited have an incentive to exaggerate the benefits they will derive from the activity. Assessing these benefits and costs by simple-minded questionnaires or by relying on the publicity of complaints will lead to the decision being based on inaccurate information, although this is a fair description of the way in which the political calculus sometimes operates. However, it is conceptually possible for the government to acquire information of greater accuracy.

Let the government attempt to buy the permission of those who feel that they will be harmed by allowing the activity and also let the government attempt to buy the permission to restrict the activity from those who feel that they will benefit from the activity. That action should be taken for which permission can be purchased at lower cost. By assuming the role of middleman, the government through the payment of compensation can increase the accuracy of the information upon which it acts.

The difficulty is that it is not easy to see why the government can play the middleman role more cheaply than can private middlemen. But if the government can be a better innovator in this marketing function it is clear that compensation may be desirable to improve the accuracy of information, that is, for efficiency reasons.

A tool of analysis frequently used by economists to uncover such information when market negotiations are prohibitively costly is modern cost-benefit analysis. I suppose that systems analysis is the best we can do in some circumstances, but some of the practitioners of systems analysis fail to realize how imperfect is the information that is produced.

Suppose that we are interested in determining how much the state should spend on automobile safety devices. To answer this question we can calculate the cost of an additional safety device and compare it to the value of the lives we expect it to save. If we are sophisticated, we can calculate this latter value by multiplying the expected decrease in deaths by the value of a typical live person. The value of a typical live person is frequently taken to depend on the discounted value of that portion of his earnings that an accidental death will eliminate.

The difficulty with this analysis is that the correct solution will be to equate the marginal cost of safety devices to the *price* that persons are willing to pay for expected reductions in their accident rate. This price will be an individual matter. It will depend on a person's demand to live longer, on his income, on the prices of other things, and on his *taste for life*. The latter fact is knowable only to himself in principle, and, although it will be revealed through negotiation in the market place over the exchange of private property, it is only poorly approximated by a sophisticated cost-benefit analysis. A poor man may be willing to pay a higher price than a rich man for additional expected years of life, especially if he has a greater fear of hell.