

Property

We begin our analysis of economics in the law by examining property law. What is property? The easy answer is that we know it when we see it. The concept of property, however, may encompass things that cannot be seen. Music, inventions, computer programs are all ideas that can be written in a corporeal form, but their primary existence is in the undefined dimension of the mind.

Lawyers like to think of property as a bundle of rights. Statute law and court decisions can add or subtract rights from that bundle. For example, home ownership may be viewed as a bundle of rights. You may sell your home to others or plant a towering oak in your backyard “Your home is your castle.” But unlike a medieval king, there are some things you may not be allowed to do with your home. Zoning regulations may prevent you from sheltering unrelated individuals or running a business out of your basement. Plat restrictions may limit the height of a fence you wish to build or even limit the color you may paint your home.

In most cases a reduction in your bundle of rights increases the rights of someone else. But changes in property rights are not always a zero sum game. There can be changes that benefit all individuals, such as mutually beneficial zoning restrictions. However, uncertainty as to how future rights may be defined can erode all existing rights. Items with uncertain ownership will not be easily transferred in private markets; thus, limiting the right of alienability and creating economic inefficiency.

Economists tend to avoid normative issues. Consequently, they rarely talk about rights. They are much more likely to begin their analysis with the given distribution of rights. However, changes in property rights can affect total wealth, market prices and the distribution of income. Economists usually assume a positive relationship between property rights and personal wealth. An expansion of property rights increases choice, and an increase in choice typically makes us better off. There are, however, counter examples. Zoning laws may restrict choice, but enhance wealth. For example, by restricting noxious individual uses of property, zoning laws can increase the overall value of property in the community.

There is the possibility that restrictions on individual choice can enhance welfare whenever there are external benefits or costs. These are benefits or costs that are imposed upon others because they pass outside the market mechanism. If I impose costs on others, then these are unavoidable costs that others must bear. This represents an uncompensated appropriation of another’s welfare.

Of course, almost everything we do has non-market effects. The color of my shirt or the deodorant I choose or don’t choose affects others. Were the mere existence of externalities an excuse for government restrictions on our choices, then there would be a rationale for a government restriction on every choice we make. We do not allow our government to intervene on this minute scale, because intuitively we know it would not make us all better off. We have seen enough of the inefficiency and waste accompanying

government decisions to know it would only make us all worse off. There is not an all-knowing government that can accurately weigh the external benefits and costs of our clothing decisions and styling choices.

Consequently, before we involve the government in the regulation of externalities we want to be sure that the benefit of the intervention outweighs the related cost. For that reason we would not want the government to interfere in those minor daily choices that have a minimal extra-market impact on others. For major externalities we might only permit government interference when it is not likely that the private market will internalized the externality. Moreover, for those situations where we view government intervention as necessary, we might prefer a minimalist approach.

Efficiency

When economists discuss efficiency they usually have two standards in mind, productive (technical) efficiency and allocative efficiency. **Productive efficiency** exists when we maximize output given a cost constraint or minimize cost given an output constraint. **Allocative efficiency** exists when we produce the bundle of goods that maximizes society's welfare given current resources. Thus, reallocating resources to produce an alternative bundle would reduce welfare. Accordingly, it is possible to have productive efficiency without allocative efficiency. Legal decisions can have an impact on both productive efficiency and allocative efficiency. However, property rights disputes are usually concerned with allocative efficiency.

The economic standard for allocative efficiency is the **Pareto optimum**. We are at a Pareto optimum when we can no longer engage in an exchange that enhances the welfare of one person without making someone else worse off. The Pareto rule assumes our inability to make interpersonal comparisons of utility. Were it possible to make such comparisons we could weigh the relative change in utilities as resources were shifted among individuals. We could unequivocally state that total social utility would be increased even though some might be worse off.

The **Kaldor-Hicks standard** of efficiency is somewhat looser. A movement toward a Pareto optimum assumes that an exchange takes place and compensation is paid so that both parties to the exchange are better off. To have a Kaldor-Hicks efficient decision we need only assume that a side payment could be made that would leave all parties better off. Compensation is not required. Accordingly, application of the Kaldor-Hicks standard could leave some individuals worse off. The standard includes two tests, the Kaldor criterion and the Hicks criterion. Together, the two tests ensure that income effects do not taint the result. The **Kaldor criterion** requires that the gainers are willing to pay the minimum that would be needed to gain the consent of the losers. Alternatively, the **Hicks criterion** insists that the maximum amount losers are willing to pay the gainers in order for them not to implement the change is less than they are willing to accept. The Kaldor criterion assumes that the right to proceed could be purchased from the losers; whereas the Hicks criterion assumes that the right to the status quo could be purchased

from the winners. The Kaldor-Hicks standard provides the rationale for governmental benefit-cost analysis. Thus, resources may be reallocated and results may be attained that would not be voluntarily achieved through private exchange.

For example, suppose the government wanted to build a new highway next to a residential community. The highway benefits the wider community, but imposes congestion costs on the nearby residents. If the benefits to the wider community were \$1,000 and the consent of the nearby residents could be gained by paying them \$900, the highway is Kaldor efficient. On the other hand, if the residents had to pay the community to remove the highway, the payment would lower their real wealth. Therefore, although the nearby residents want \$900 for their consent, they might not be willing to pay \$900 for removal of the highway. If the maximum amount the nearby residents are willing to pay for highway removal is less than the community is willing to accept, then the highway is Hicks efficient.

The Coase Theorem

Given some minimal restrictions, it can be assumed that private market transactions will produce a Pareto optimal result. Court decisions and legislative actions that attempt to deal with externalities often leave losers uncompensated. Consequently, they may be Kaldor-Hicks efficient while also being Pareto inefficient. The Coase Theorem sets out conditions under which the private market will internalize an externality and under which the private market will produce an efficient result. It also provides some insight into how court decisions that determine the allocation of property rights affect net welfare.

The Coase Theorem states that if property rights are well-defined and transactions costs are zero, all externalities will be internalized. Moreover, this is not dependent on the initial distribution of property rights. Given any distribution of rights, the result can be Pareto efficient if all property finds its way to whoever values it the most. This can be achieved through private incentives for wealth maximization. However, when transactions costs are high a value enhancing trade may not occur. Thus, the current distribution of ownership may not achieve a Pareto optimum. Accordingly, the assignment of rights may determine whether or not society achieves a Kaldor-Hicks optimum. Assuming the zero transactions costs, the initial distribution of rights has no impact on the efficient solution. When there are high transactions cost a Kaldor-Hicks efficient result may only be achieved when the courts allocate rights to those who value them the most.

Coases' theory highlights the cost of using the market. These are termed transactions costs. They can consist of information costs, search costs, negotiating costs, contractual costs and policing cost. It is these costs that provide the incentive for combining a number of production tasks within a single firm. Should GM purchase auto parts from independent suppliers or should it manufacture its own? The efficient decision

will depend on comparing the cost of using the market versus the cost of internal production control.

Coase illustrated the application of his theorem with the tale of the farmer and the rancher. In the section on property, several derivative examples are provided. The rancher's cattle if unrestrained will damage the farmer's crops. The damage to the farmer's crops is an external cost of ranching. However, a less common view might hold that the damage to the farmer's crops is a relevant cost of farming. If the farm were not located next to the ranch, there would be no damage to the farmer's crops. Since the externality depends on both the location of the rancher and the farmer, either could be said to have caused the problem.

Coase demonstrated that regardless of who has the initial right, the right will find its way to whoever values it the most when transactions costs are zero. The final result will be technically efficient. In a world of costless transactions, all externalities will be internalized and the private market will achieve an efficient result that is independent from the distribution of rights. In the rancher-farmer example, the easiest way to find the efficient result is to ask what would happen if a single owner operated both the farm and the ranch. An efficient result should maximize the joint profits of the farm and the ranch. Were that not so, it would be possible to make a side payment that left one party better off without injuring the other party. Obviously, if there were single ownership, the maximization of joint profits would be the objective.

Possession and Externalities

Pierson v. Post (1805) is the earliest case included in the property law section. It deals with the definition of property rights in the wild. In our pursuit of natural resources at what point do we gain a property right in that resource? The point at which we gain a claim in the resource that excludes others from access to the resource is crucial for several reasons. If property rights only adhere after substantial efforts then we may be deterred from investing in the pursuit of those efforts. Would firms engage in the heavy investments, such as those for oil exploration, if they knew that at the last moment an interloper might snatch the oil pool away? On the other hand, if property rights vest too quickly then resources may be owned by individuals who are not the most able to exploit those resources for use in society's best interest. We would like the land with underlying oil pools to go to owners who have the resources to extract that oil.

Fontainebleau v. Forty-Five Twenty-Five (1959) is a case of nuisance or what the economist would call a negative externality. A nuisance exists when the unwarranted use of your property damages others. From an economic standpoint, one person's nuisance is another person's resource. If I pollute the air while manufacturing a product, I am using the air as a resource in production. As the Coase theorem makes clear it takes two to create an externality. Consequently, the cause of the externality can be attributed to either party.

In this case, the Fontainebleau Hotel built a tower that cast a shadow over the pool at the Eden Roc Hotel. Did the Fontainebleau have the right to extend the height of its hotel or did the Eden Roc have the right to the sunshine the added floors would block? An efficient solution to this problem will depend on first defining who owns what. How will the court define property rights in this case? Does it matter? According to Coase, with respect to efficiency the initial distribution of rights may not matter. It only matters subsequent exchanges of right are prohibited by the market.

When transactions costs are high it may not be possible to internalize the externality through private bargaining. Therefore, the initial definition of rights may affect the most efficient use of the resource. *Boomer v. Atlantic Cement Company* (1970) concerns a cement plant that emits pollutants affecting the surrounding neighbors. Is the negative externality caused by the factory or by the presence of the residents? The pollution is a nuisance. However, the cost to the neighboring properties is small compared to the financial impact from eliminating the emissions. Should the court award an injunction or monetary damages? Are there economic reasons for preferring monetary damages more than an injunction? Previous case law indicates that an injunction would be warranted.

Pierson v. Post dealt with the first possession of a wild animal. *Spur Industries v. Del. E. Webb Development Co.* (1972) covers the first possession of an environmental resource. The externality was created by the construction of residences next to an agricultural business with feedlots that emit bad odors. Because of the relatively low price of land in the region, several tracts in the surrounding area were purchased and a residential development, Sun City, was built. The odors from the feedlots made it impossible to sell nearby homes and disturbed the current residents. Del Webb, the developer, complained that the odors made the feedlots a public nuisance. The court agrees with the plaintiff that the feedlots are both a private and public nuisance. Should the operation of the feedlots be enjoined or should damages be awarded? Who should pay the damages?

Takings

The fifth amendment of the U.S. Constitution prohibits the government from taking private property without just compensation. You may not be, “deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.” Private property can be taken by physical invasion, i.e. the government occupies the property so long as just compensation is paid. However, governmentally imposed regulations can diminish the utility of private property and, thus, its market value. The value of the property is shifted from private use to a public use. When the government declares that you cannot build a home on your property because it is a wetland, it has essentially shifted part of the value of that property in private use, home construction, to a social use, the care of wildlife. If the property is still available for alternative less desirable uses, such as a fishing pond, the land may not

have lost all of its value. There will be a partial regulatory taking, rather than a total taking of your property.

The first time that the Supreme Court stated that physical invasion was not a prerequisite for a governmental taking was in *Pennsylvania Coal v. Mahon (1922)*. The coal companies purchased the mineral rights and the right to support from the landowners. The landowners were left with only the surface rights to the land. The surface owner assumes the risk that the land may not be supported. The Kohler Act of 1921 restored the support rights to the surface owners. Legislatures have a right to regulate public nuisances. Governments could not function if that had to compensate property owners for every diminution in value that resulted from legislation. But when a regulation totally destroys the value of the property there is a taking. Did the Kohler Act constitute an unconstitutional taking?

The concept of a regulatory taking should be a relatively easy one for an economist to grasp. We recognize that we have experienced a loss whenever the market value of what we own goes down. It does, however, create a conflict between the operation of the government and the U.S. Constitution. Almost every government regulation, even a minor one, will be accompanied by a taking because a regulation by its very nature limits private behavior. If the government had to compensate for every taking it would be swamped in administrative costs. Accordingly, society as a whole society may be better off if some takings are not compensated.

Kaldor-Hicks efficiency may be the operational goal for partial takings. If the government decides it will not compensate all regulatory takings, then it must have a rule that distinguishes those takings that must be compensated from those that need not be compensated. This is the quandary that the courts now find themselves. *Penn Central Transportation v. NYC (1978)* and the *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency (2002)* represent two attempts at resolving this issue. In the near future, it is likely the Supreme Court will again have the chance to comment on this matter in *Kelo v. City of New London*.

Penn Central Transportation v. NYC (1978) concerns a landmark preservation site. The decision discusses the reciprocal nature of the externalities generated by landmark preservation versus those created by zoning regulations. Rehnquist in the dissent argues that the costs of landmark preservation are largely borne by the owner of the historical site. In addition, reciprocal benefits are minimal. This differs from the zoning regulations that create reciprocal benefits for most members of the community. The decision also discusses the nature of the costs imposed on the landmark owner. The majority emphasizes the fact that under the regulatory restraints do not bar Penn Central from earning an adequate return on its investment. Therefore, the prohibition on building an addition that would increase the firm's profitability has little or no impact on determining whether a taking has occurred. Moreover, Penn Central had received some benefits from its landmark status and from the transferable development permits it had been granted. The dissent correctly analyzes the decision in terms of opportunity cost. Lost opportunities represent a real cost. Given the nature of the opportunity denied Penn

Central, there is a significant economic cost attached to the regulatory restraint. The dissent also raises a question that has troubled economists. How do you empirically determine an adequate return?

In *Penn Central* the court refuses to propose a bright line test for determining a regulatory taking. A taking exceeding a certain absolute dollar value or a percentage share of the assets market value are two obvious tests. Implicitly, the court recognizes that each of these tests is subject to manipulation. Both can be influenced by the disaggregation of ownership and property rights. For example, if the air rights above Penn Central are separated from the rest of the entity, then a prohibition on building a tower above the terminal would be a complete taking. We seem to be left with the vague standard that when the current use given the regulatory restraints is economically viable, there has not been an unconstitutional taking and no compensation is necessary.

Tahoe-Sierra Preservation Council, Inc. V. Tahoe Regional Planning Agency (2002) concerns a temporal taking. Landowners surrounding Lake Tahoe were denied construction permits for a period of six year while the planning agency decided how it would regulate development surrounding the lake. Is this a complete taking that requires compensation? There was a total denial of use, but it was only for a temporary period. Again the court, like in *Penn Central*, declines to apply a per se rule. The majority emphasizes the temporary nature of the moratoria and concludes that this does not require compensation. In support of their argument they cite the need of temporary moratoria for planning purpose. If governments had to hastily plan in order to avoid paying compensation, they might be forced into making incorrect premature decisions. The dissent agrees that the government need not provide compensation for temporary moratoria needed for planning purposes. These are within a landowner's, "reasonable investment backed expectations." However, these short-term delays could be distinguished from the type of six-year prohibition on construction that occurred in this case. Furthermore, by labeling the moratoria temporary the government may repeatedly gain a leasehold on private property without compensation.

The latest Supreme Court decision on takings, *Kelo v. City of New London* (2005) has been highly controversial. Kelo and several other residents of New London had their homes condemned by the city. The city was exercising the power of eminent domain in an effort to undertake a major redevelopment project. The project included the transfer of land to a private corporation who would occupy part of the redevelopment project. Kelo and a few other residents protested that this violated the Fifth Amendment which limits government takings to those for "public use." The Court must decide whether "public use" should be defined narrowly or broadly. How does the decision affect the private welfare of the homeowners and the public welfare of the community? Does the court apply an adequate balancing of benefits and costs?

Rule Against Perpetuities

The rule against perpetuities is a common law rule that states that the interest in an estate or property must vest before 21 years from the death of someone who was alive when the interest was created. The rule against perpetuities limits the control the dead may have over the living. When applied to property, it in effect prohibits clauses in property contracts that limit the future transfer of property. For example, if the owner of family estate might want to see it remain with the family, a deed might contain a clause that prohibits the sale of the land: thus, the right to sell the property would never be owned by future generation. Such a clause would violate the rule against perpetuities. There are economic arguments for and against the rule. To the extent the rule limits the conditions I may set on the transfer of my property, it reduces my incentive to accumulate wealth. However, by pushing the vesting of rights far into the future, it is likely to have little impact on the present value of the resource and my decision to accumulate wealth. The main argument in favor of the rule is that those who currently own the property are probably in the best position to place that property in its most efficient use. To the extent their allocative choices are constrained, the less likely it is that the property will be efficiently utilized.

In *Quattro Mining* the rule is used to challenge the separation of mining rights in the land from the surface rights. The background is similar to that in *Pennsylvania Coal v. Mahon*. In this case, the subsurface rights also provided the right to use the surface for conveyance at specified prices for transporting the coal. This right effectively gives the coal company a right in perpetuity to purchase the surface at a specified price. The owner of the surface rights argued that this violates the rule against perpetuities, because it limits their right to sell the surface rights. Is there an economic rationale for limiting the duration of this right? Should the rule against perpetuities limit property interest?

Necessity

There may be emergency situations where it is impossible for the parties to bargain over a property right. A lost hiker may need access to a cabin or as in the case of *Ploof v. Putnam* a boat may need a safe harbor in a storm. Seeking safe shelter from the storm, the plaintiff attempted to moor his boat to the defendant's dock. The defendant's agent unmoored the boat and cast it off into the storm. The ship was wrecked and the passengers injured. Was the plaintiff's trespass on the defendant's property justified by the storm? Did the defendant have an obligation to provide shelter? How would the Coase theorem assign rights in those situations?