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## **The Market as a Commons: An Unconventional View of Property Rights**

**Thomas M. Carroll,  
David H. Ciscil, and  
Roger K. Chisholm**

This article represents the synthesis of our three different approaches to the relationship between property rights and market activity. We all had serious reservations about the dichotomous treatment of the subject in the "new microeconomics." It appeared obvious that property rights and markets are not only complementary institutions (as in solving the problem of the commons), but also could become substitutes if social concern for security begins to supercede considerations of efficiency. We attempt here a closer scrutiny of the trade-off between the scope of property entitlements and the degree of market efficiency. We believe our investigation can provide a better understanding of the nature and causes of monopoly and the consequences of government regulation. We hope that such an effort will breathe new relevance into microeconomic theory.

The theme of property rights and market efficiency is developed through three independently written sections. A neoclassical perspective is presented in the first section. The argument is advanced that competitive

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markets are often viewed by participants in much the same way that the “commons” is characterized by economists. If imitators are free to enter a market, lowering the market price of the traded commodity, then the “property rights” of the original traders are somehow compromised. Competition can be as destabilizing as more conventional third party effects, leading to the demand that property rights be extended to exclude newcomers from the market itself. But with the establishment of monopolies, markets soon develop for exchanging monopoly licenses, making the gains of monopoly formation transitory, while the resource misallocations created by monopoly power become institutional fixtures of the economy.

The second section provides the institutional perspective, tracing the evolution of property rights through five stages of economic development. Property and markets are seen as mutually supporting through the early stages of capitalism. But the increasing concern for guaranteeing the value of property leads to a trade-off between the security provided by property and the effectiveness of markets. This trend is projected into a future when the influence of market decisions will be eclipsed by bureaucratic entities that represent the culmination of “complete property rights.”

The third section concludes with illustrations of how the model developed in the second section can be applied to economic events. Examples from anthropological economics are used to show how primitive societies tend to experience the various stages of property and markets. The model is also used to explain why government agricultural policies necessarily erode the relevance of the competitive model to the U.S. farm industry.

### *The Neoclassical Perspective*

There is a paradox latent in the economic theory of property rights as it is presented by the members of the Chicago School of economics, typified by the work of Ronald Coase, Harold Demsetz, and Eirik Furubotn and Svetozar Pejovich.<sup>1</sup> Essentially, a theory of property rights is meant to replace the old idea of “market failure” made famous by A. C. Pigou, Richard Musgrave, and Francis Bator.<sup>2</sup> According to Coase, an external cost, such as a rancher’s cattle trampling a farmer’s crops, is simply a case of incomplete specification of property rights. Once ownership is specified (that is, a determination is made of which party bears responsibility or liability), voluntary agreement (in the absence of high transaction costs) will eliminate any such externality and result in an efficient allocation of resources.<sup>3</sup> Demsetz followed by arguing that private property (the right to exclude) is a necessary precondition for the functioning

of a market;<sup>4</sup> only when individuals can exclude nonpayers from the use of resources will payment be assured. When both parties to a transaction have the right to exclude, a *quid pro quo* relationship is established. Without private property, society will experience the “tragedy of the commons”—ownership by all actually means ownership by none.<sup>5</sup> With private property, markets alone will guarantee an efficient allocation of resources.

The paradox appears to rest on the possible trade-off between private property and free markets. If the essence of private property is the ability to exclude, the requirement for a free (efficient) market is the lack of exclusion. That is, markets must be accessible to all; the ability to exclude others from the market is monopoly power. While it is necessary to eliminate the commons by introducing private property, it is also necessary to preserve that commons which is the market.

This potential conflict between property and monopoly has been cited by E. G. West and attributed to Adam Smith:

It has been argued that the essence of monopoly to Smith was the ability to exclude. But he also wanted a legal framework that respected property, and “property” also means the ability to exclude. Property, however, also means the exclusion of predators, whereas monopoly means the exclusion of competitors. Competition *required* property; for this was the basic prize or incentive in the positive sum game which would, for *all* players, improve on the Hobbesian jungle. The danger was that while an initial “contract” might set up property rights with the “proper” kind of exclusion, in some later period, interest groups might effectively rewrite property rights in their own favor and progressively pervert the constitution.<sup>6</sup>

To put the matter succinctly, efficiency is achieved when many individuals own resources and/or final products which are close substitutes for one another, and when these commodities are exchanged in an institutional framework (the market) with access provided to all would-be participants. The ability to exclude, which constitutes property rights, provides the incentive for each individual to consider his own self-interest in the exchange process. The inability to exclude, which constitutes a free or competitive market, precludes the manipulation of the terms of exchange for one’s own end and allows the attainment of the social goal of efficiency.

Without private property, exchange would not take place, because “taking” would require less individual effort than exchanging. However, with everyone trying to take, no production would occur, and ultimately there would be no commodities, either to take or to exchange. So the institution of private property can be seen as a mechanism which, in the

long run, benefits all members of an economic system. Knowing that one's own effort will ultimately improve one's own position allows the making of long-range plans.

With private property, but without markets, individuals can consume only what they produce themselves. With both private property and markets, the stage is set for the gains from the division of labor and specialization. Markets transform the ability to exclude into the ability to exchange; and since exchanges are voluntary, all are assured of being better off (in their own estimation) after the exchange than before it. Not only does a market provide the ability to exchange an object of lesser value (to the individual) for an object of greater value, but also, through the forces of supply and demand, the market ultimately assigns an exchange value (or price) to these objects. And the knowledge of this set of prices and the desire for an improved standard of living by individual participants in turn direct resources to their most efficient use.

But while the market establishes value, a free market does not guarantee value. The exchange value of a commodity is vulnerable to changes in supply or demand. If more of a commodity is supplied, or less of it demanded, the value of an object, in terms of what it can be exchanged for, will decline. Private property still exists, but the ultimate standard of living that property provides will be lower.

It is in the attempt to guarantee the value of property that the conflict between property and markets begins to emerge. There are two forces which can diminish the value of property. One is the "external" effect which compromises the integrity of property by the incomplete ability to exclude prior to exchange. Instances of "property failure" include the inability of individuals to appropriate all the benefits in the production of (especially) intangible commodities, such as knowledge; the ability of individuals to use a resource without paying for it (the problem of the fishery or common oil pools); and the incompatible use of two resources or commodities (Coase's examples of the sparks from a train burning a farmer's crops, or the noise from a confectioner's machinery disturbing the tranquility of a physician's office<sup>7</sup>). The other force is the competitive market itself. Competition works because the new entrants to a market reduce the price of the commodity being sold by established firms. Since the "cost" of such a revenue loss is borne by firms collectively, new firms take no account of the effect of revenue reduction upon existing firms. The motive force of a competitive market is actually the uncompensated externality.

Figures 1 and 2 illustrate the symmetry between the externality problem (property failure) and the monopoly problem (market failure). In

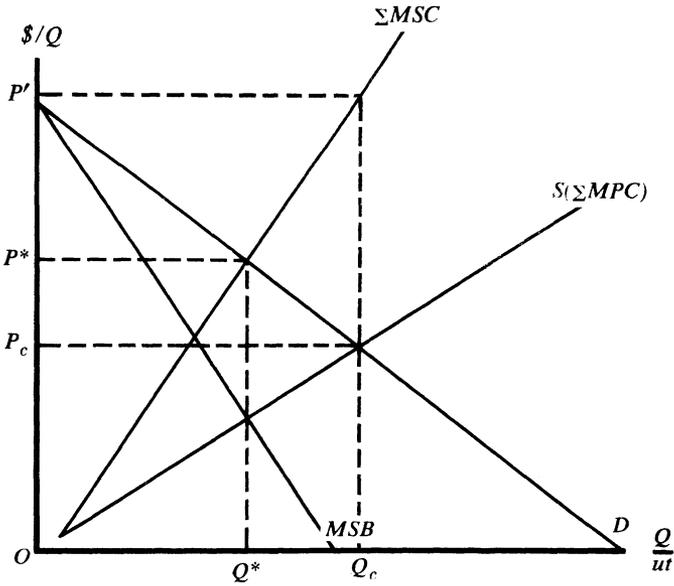


Figure 1. The Reciprocal Nature of Externalities

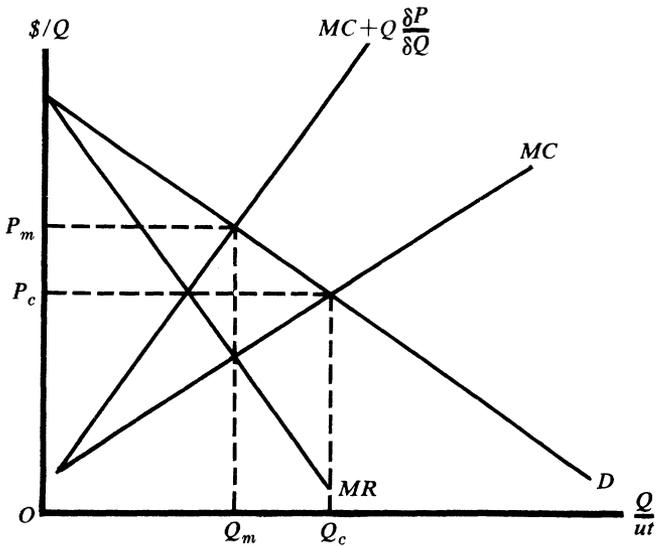


Figure 2. The Reciprocal Nature of Monopoly

Figure 1, the familiar diagrammatic exposition of the problem of external costs and its solution is provided. The supply curve in a competitive market results from the *private* marginal costs of producing the commodity in question. If all costs of production are captured in the private costs, and all social benefits are captured in private demand, then the competitive solution ( $P_c, Q_c$ ) will achieve an efficient allocation of resources. The existence of external costs results in social marginal costs ( $\Sigma SMC$ ) lying above the market supply curve. In the presence of uncompensated external costs, too much of the commodity is produced at too small a price. The market sends out distorted signals, and the victims of external costs lose from the undervaluing of the resource they (incompletely) own.

While economists such as Pigou and Bator saw the externality distortion of the market process as justifying government mediation in the exchange process, proponents of the “new microeconomics,” such as Coase, argue that when external effects are limited in scope (resulting in low transaction cost), voluntary agreements could eliminate the need for direct government intervention. In the famous example of cattle trampling farmers’ crops, requiring ranchers to compensate farmers for damages (that is, extending the property rights of farmers) would cause ranchers to internalize the external costs of cattle raising. Perceiving an increase in the marginal cost of cattle production, ranchers would reduce the size of their herds, eventually leading to an increase in the price of beef. Similarly, the cost of producing corn would fall, resulting in increased corn production and a lower market price.

Furthermore, Coase argued that the reciprocal nature of the externality could also be used as a basis for extending the property rights of the rancher. If the rancher did *not* bear liability for crop damage, the farmer would have an incentive to compensate the rancher for reducing the size of his herd (thereby reducing crop damage). The rancher would then perceive that the net revenue from raising an additional steer is the market price minus the forgone payment from the farmer. By equating marginal cost with net (marginal) revenue, ranchers would reduce the number of cattle produced, raising the market price.

But the critical premise of the Coase theorem is that such bargaining occurs in an environment of zero transaction costs. Neither the number of farmers nor the number of ranchers must be so great that a free rider problem is encountered. If there are too many farmers, each will rely on his fellows to make side payments to ranchers, and no such payments will be made. If there are too many ranchers, a voluntary reduction in the size of the herd may not result in compensation by farmers. Large numbers reduce the externality problem to the problem of the commons, that

is, property rights (or liability) are incompletely specified, and markets cannot achieve an efficient solution.

Yet, if numbers are few enough to provide a private solution to the externality problem, they may also be small enough to eliminate a competitive market. Seen from the position of a competitive producer, the essence of market entry is the reduction in market price which occurs at the expense of established firms. The essence of monopoly is that an increase in output is perceived as producing a reduction in the price of inframarginal output.

In Figure 2 the similarity between the monopolization of a market and the elimination of external costs is presented. The conventional monopolist maximizes profit by equating marginal revenue (price minus the loss of inframarginal revenue due to a price decrease) with marginal cost. A competitive firm, as price taker, does not perceive the erosion of inframarginal revenue as a consequence of output expansion; the cost of output expansion is "shared" among all producers, and high transaction costs make cooperation (or collusion) infeasible. From the perspective of the individual producer, the decline in market value arises from the inability of established firms to exclude new entrants. Profits eventually become normal because the selling costs generated by new firms ( $-Q \cdot dP/dQ$ ) are external costs.

If the market is itself an engine which generates uncompensated selling costs for established firms, then a paradox is established. Efficiency requires full specification of property rights so that external costs can be eliminated through private contracts, yet the market, which depends upon the entry of new firms to eliminate the (excess) profits of others, can belong to no individual participant. The dividing line between the inefficient external costs generated by incomplete property specification and efficiency generating external effects that are the very heart of a competitive market has yet to be satisfactorily determined by economists. Yet, it is precisely the haziness of this distinction which necessitates the regulatory function of government.

Government, with its monopoly on coercion, can impose "value preserving" regulations on individual agents in an industry when transaction costs are too high to permit voluntary agreement. The fact that regulations designed to reduce market imperfections often lead to monopolistic practices is easy to illustrate. A partial list includes patent and copyright law, occupational licensing, franchises for public (or private) utilities, restrictions against price advertising, and even zoning ordinances.

The argument for patents is that imitators would reduce the value of an innovation, resulting in the inability of the initial innovator to recover

research and development costs. To assure the continuation of inventive activity, one firm is given the ownership of the market for that invention, which includes the right to exclude imitators, at least for a specified period. Occupational licensing arises from the demand for consumer protection and the preservation of the shared reputation of professionals, but the ability of the credential granting agency to exclude the unqualified carries with it the ability to control the market supply for professional services. Franchising natural monopolies supposedly preserves the ability of the established firm to realize economies of scale, but continual monitoring is necessary to prevent monopolistic prices.

Another consequence of extending the ownership of property to encompass the right to exclude from the market is the eventual emergence of a market for the monopoly license itself. A New York cab driver can usually receive more for his taxi medallion than he can for his cab. A farmer's land sells for a price which includes the (cartel) value of his acreage allotment. In states in which liquor licenses are attached to the place of business, property leases are sold for a price which includes the capitalized value of monopoly profits accruing to the original owners of the license.

The transferability of the right to participate in monopolized or cartelized industries has the ironic effect of eliminating monopoly profits from the income stream of the owners of such restrictive devices. This consequence has been noted by Richard Posner.

The estimates of the monopoly price increase are based on the existence of persistently above-average rates of return in some industries, which the authors attribute to monopoly. The difference between those rates and the average rate of return for the industries in the sample is used to estimate the amount of monopoly profits in the revenues of the monopolized industries, and in turn the price increase necessary to produce those profits. This procedure yields an estimate—typically small—of the percentage by which the monopoly price level exceeds the competitive price level. But the estimate is biased downward. It ignores the tendency of competition for a monopoly position to transform expected monopoly profits into costs and thereby push down rates of return in monopolized industries toward the competitive level. A monopolized industry might be charging a price far above the competitive price yet be earning no more than a normal return.<sup>8</sup>

The point is that the right to exchange monopoly licenses actually amounts to the right of the original owner of monopoly power to capitalize such power in the selling price of the resource to which such monopoly power is attached. This process, in turn, will tend to establish an institutional rigidity and legitimacy to the ownership of monopoly power.

For example, the income from agricultural price supports becomes capitalized in the value of agricultural land. Farmers who do not own the land still receive only a normal return for their effort. Similarly, farmers who purchase their land after the institution of output restrictions pay a price for the land which includes the capitalized value of the profit stream to the original owner. And after monopoly licenses are exchanged, the preservation of monopoly rights becomes an equity issue. For society to eliminate the monopoly would not reduce the wealth of the original owners but would create an economic loss for the subsequent generations of farmers who receive only a normal return on their financial investment. The transferability of monopoly rights means that the benefits to monopoly are transitory, whereas the cost of monopoly—inefficient resource allocation—becomes a permanent fixture of the economy.

### *Institutional Perspectives*

Property rights provide numerous analytical problems. Not the least of these is the historical nature of the definition of rights and duties of property ownership. Property rights within a Western industrial society have a decidedly different complexion from property rights in non-Western and preindustrial cultures. Property evolves within a particular set of historical institutional and technological boundaries. That is, at the outset it is important to concede that the appropriateness of the scope of property rights is bound to a particular time and situation.

The most obvious evolution of the property concept has been its coverage. Until recent times this generally was limited to real or physical resources. Property rights centered around the ability to use property exclusively. The spread of industrialization in its capitalist form led to the development of types of financial (incorporeal) property—that has an existence independent of its physical manifestations—and property easily transferable in the market. Property rights became more complex, protecting the contract as well as attempting to include the return to investment as property. Finally, many peripheral intangibles, such as goodwill, market share, and human capital, have taken on property-like qualities. This evolution and expansion of the property concept has probably been responsible for much of the property rights debate.

The evolution of property rights is in contrast to that of market activity. While markets have been a historical engine of efficiency, both for low cost production and distribution and as an incentive for technological change, property rights have been based on equity. Property rights increase the security of the property owner and his ability to obtain in-

dividual justice. By contrast, markets exist to solve the scarcity problem. They tend to be efficient, but they are also capricious in terms of individual concerns and desires. Property rights developed as a method to achieve security in a chaotic situation. Thus, the development of private property from real property to intangibles has been an evolutionary process aimed at improved social security and stability.

This dichotomy of markets and property rights creates some perceptual difficulties. Indeed, an efficient competitive market cannot be effectively implemented without prior and appropriate definitions of property rights of resource owners. However, property rights serve as a source of primary security, that is, the reduction of risk, that encourages owners into market activities. Property rights must be imagined as causally prior to market efficiency but conceptually not the cause of efficiency.

This is the crux of the issue. Property rights and market organization are interdependent variables of the economic system. This clarification sheds light on one of the anomalies of a market economy. Monopoly power in a market reduces efficiency and creates an imbalance in social equity. At the same time, monopoly can be perceived as owning a property right in the market, that is, the right to exclude extends to the market. Thus, monopoly power increases personal equity in terms of security and stability. Historically, the extremes of no property and monopoly power were paired in the Industrial Revolution. The decline of feudal society left unclear the proper social and economic rights associated with the commons. For example, one of Marx's early protests concerned the rights of German peasants to gather wood in the forests.<sup>9</sup> At the same time, mercantilist economic policy fostered monopoly markets and exclusive property rights through grants of trading rights.

Paralleling the development of property rights has been the rise of duties or obligations associated with property. Property rights are guaranteed and policed by agencies of the state. The extension of property rights involves a *quid pro quo* with government. As the range and scope of property rights have expanded in our society, government has exacted increased obligations, ranging from public disclosure to compliance with safety rules, as payment for enforcement of a complex property rights system.<sup>10</sup> Indeed, the rise of administrative regulation of economic activities can be traced to the expanded duties required of property owners as the state enforced enlarged property rights.

In the United States, public intervention with private property is usually traced to the regulation of grain elevators in Chicago in the 1877 *Munn v. Illinois* decision. The Supreme Court ruled that business "affected with a public interest" could be regulated—both its use of property

and financial return on property—without violating the equal protection section of the Constitution.

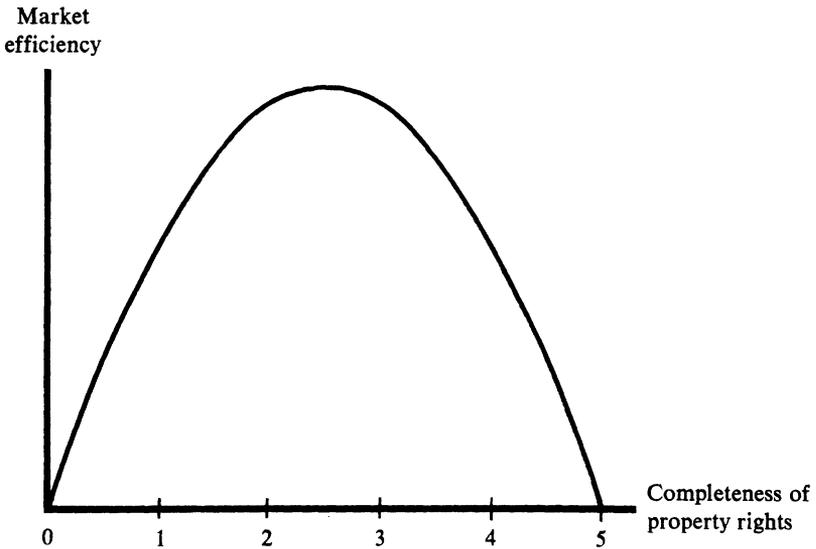
While the initial justification for clothing property with a public interest was perceived monopoly powers, later cases, such as *Brass v. North Dakota* (1894), made it clear that other undefined elements were important in the decision to regulate publicly.<sup>11</sup>

When geographic peculiarity or economies of scale allowed one firm to serve a market, a monopoly firm appeared that was, in essence, able to claim the market as its property. Public regulation codified this corporate power into formal or juristic law. The result was a strengthened private monopoly through public regulation. However, the key to regulation is the addition of explicit societal obligations—public safety, uniform accounting, reasonable and nondiscriminatory rates—for recognition of monopoly or semimonopoly property rights. Finally, *Nebbia v. New York*, a 1934 case concerning the ability of New York State to regulate milk prices, illustrates the extent of state regulatory power and the correlative of private duty that parallels expanding property rights.

*Nebbia* made it clear that there are no substantive limitations on the power of the state to establish economic regulation. The creation of an industry or occupation “affected with a public interest” requires only procedural due process with respect to property rights.<sup>12</sup> Regulation, usually seen as an intervention in property rights, also expands their scope. For utilities, freedom from various types of competition, geographic market integrity, and stable revenues and returns are all partially guaranteed by the state, cloaking some former market activities with the rights of property for the regulated firm. Similar patterns, often less well defined, have developed throughout industry and in several critical occupations. The process of defining both property rights and duties has occurred within the context of private and social security. Efficiency as a concern has been peripheral to recent institution building in the area of property rights and public regulation.

This review of the nature of property rights and their relationship to the state suggests degrees of property, that is, a hierarchy of the concreteness of property rights. This is illustrated in Figure 3. At the lowest level is the

commons, property with no rights. Much has been written on the tragedy of the commons, documenting the abuse of free-for-all property. However, it is not a one-step jump to property rights. There are four levels, from an economic point of view. First, there is the right to exclude. To eliminate the abuse of property, its use must be allocated to someone (or some collective group), and the right to deny use to others must be pro-



NOTE: The hierarchy of property rights consists of: 0, no property rights (the commons); 1, the right to exclude; 2, the right to exchange freely; 3, protection of value; 4, capitalization of value; and 5, collectivization or bureaucratization.

Figure 3. *The Property Rights–Market Organization Trade-Off*

tected. Second, the right to exchange freely develops as an assistance to market activity, allowing the consideration of alternative uses in the allocation of resource activities. Both of these rights extend privileges to owners, but they can be justified by the fact that the rights to exclude and exchange eliminate chaos and provide the minimum security needed for (economic) business decision making. Decision making in an atmosphere of security of limited property rights encourages increased market efficiency. Classical nineteenth-century social Darwinism emphasized the progress that occurred in new product development and in the spread of the market through minimal protection of property and maximum use of free markets. However, the general instability of markets and thus the changing value of inputs and outputs led to demands from several sectors of the late-nineteenth-century economy for stabilization.

Stabilization, or the guarantee of value, is a property right associated with the twentieth-century rationalization of industrial organization. A

guarantee of value restricts the arbitrary and capricious market movement of property values or incomes stemming from the ownership of property. A guarantee of value increases the security of property. Anti-trust cases of the 1920s which are usually seen as anomalies fit into the pattern of property rights development. From the *United Shoe Machinery* case of 1918 through the *U.S. Steel* case to the *International Harvester* case the Supreme Court was examining the bases of illegal monopoly power. Mere size, which allows effective rationalization of industry and stabilization of value, was not illegal. Monopoly, or more properly oligopoly, power was only illegal if it abused in the market the property rights of exclusion and free exchange. Indeed, the *Standard Oil* case (1911) can be seen as an attempt to redress the offence against abused oil producers and to establish the property rights of future producers.<sup>13</sup>

This tension between property rights and markets culminates in the creation of the monopolistically competitive market. Temporary monopoly power gained through brand identification or technological advantage is translated into improved security by temporary guarantees of property value. However, the constant influx of new products or imitators—gales of creative destruction—provides the long-run efficiency associated with market efficiency.

Fourth, property can be completely capitalized. The value of the property and the value of the intangibles of privileged position are partially protected in a rationalized market. The value of the future stream of income from this protected position is then exchanged in the market—a competitive market that exists independent of the commodity the property produces. But movement in the commodity market can cause radical revisions in the value of a stream of discounted future benefits to property. Capitalization of the value of property involves something like the pyramiding of ownership in holding companies. Instability in any section of the present production system is amplified to the capitalized value of property. Capitalization leads property owners to seek protection, usually through the government, from dramatic movements in the future stream of benefits; this is seen as property confiscation by the owners of capitalized property.

However, complete protection of capitalized property leads to the fifth level of property rights: collectivization for stabilization of the future. If all property were exclusive, exchangeable, valued, and capitalized, the social result would be ambiguous. Since all property is complete, each unit of property is a minimonopoly. The complete collectivization of an economy through property rights eliminates the ability of markets to function, reducing the social environment to that of the commons unless

the government steps in to plan. It is the government bureaucracy which must be saddled with the burden of protecting collectivized property. The property owner becomes obliged to accept the further duty of allowing the bureaucracy to plan and to implement the production of the economy.

The bureau itself serves as a "super monopoly." As characterized by W. A. Niskanen, the bureau can function as a perfectly discriminating monopoly, giving society a choice of all or nothing, so that any consumer surplus is confiscated by the bureau.<sup>14</sup> However, as a public institution, the bureau is also a nonprofit institution, so monopoly profits are not earned. Any surplus the bureau may create through operation or management of production and distribution must be absorbed by factor costs. With collectivized property, the market is eliminated as far as commodities themselves are concerned; indeed, output may not be sold, but instead is financed through taxes or other payments. However, property is still formally private and thoroughly complex in the legal sense. Owners of property receive payment from the bureau that uses the resources.

A brief summary is in order. Property rights must be considered within the three aspects of property: (1) the rights and duties of property; (2) the historical evolution and asymmetrical assignment of property rights; and (3) the degree of concreteness of property rights. The points at which there are no market and no property rights in Figure 3 are equivalent to the commons. Eighteenth- and nineteenth-century development of property rights can be visualized on the upward side of the curve. For free markets to operate properly, that is, to promote productive efficiency, the rights to exclude and to exchange tangible properties had to be guaranteed. However, in the late nineteenth century there were demands for more social security and stability through the extension of property rights. These demands came from property owners who wanted rights extended both to various intangibles (goodwill, human capital) and to capitalization of guaranteed value (state protected utilities).

Twentieth-century property rights issues are concerned with the trade-offs on the downward side of the curve in Figure 3. The more complete property rights become, the less effective and efficient are market operations. However, the price of a free market, in a society which already protects the basic rights to exclude and exchange, is a reduction in the security and stability provided by more complete property rights. Thus, the critical issue in a corporate society is not the assignment of basic property rights; rather, it concerns the fact that the increased economic security gained through more complete property rights assignments has costs. First, market efficiency is reduced, not enhanced, through extension of complete property rights to more resources in the system. Second, since the exten-

sion of property rights usually has been associated with increased duties to society, there will be higher levels of socialization of the economy corresponding to the granting of more complete property rights.

### *Exemplifying the Model*

Several examples will help to explain the model described above. One such is an anthropological study of Haiti, which illustrates the various stages of market control, some in existence simultaneously.<sup>15</sup>

#### *The Haitian Market*

When the French were driven from Haiti in the very early 1800s, the situation was close to the no private property, no market case. The former slaves carved out farms on which they subsisted, defending their land as best they could. The Haitian peasant today lives on these farms in extended families, the outside world screened out by surrounding plant growth. The families grow much of what they need but must trade for some necessities. Thus, they must enter the market.

Markets are located in various villages. To the uninitiated, there is total chaos, but in fact there is a considerable order. The market is technologically simple but very efficient. The peasant is the arbitrator in the market through his actions but also faces risks and in turn imposes risks on others. By using his production at home, selling in the local market at barter, or going to regional markets and selling to export buyers for cash, the peasant seeks the best opportunities for himself, given existing prices. His actions impose externalities on others in the form of price changes, and it is these which cause the peasant family to take measures to protect against the risks of the market.

The peasant farm uses labor-intensive technology (now being called appropriate technology by some neo-Luddites). Several crops are grown to spread risk, since not all crops fail at the same time or sell at low prices simultaneously. The farmer grows root crops below ground, vines and creepers at ground level, grain crops above ground, and trees and climbing vines in the air. Diversification increases the efficiency and reduces the risk of land use.

The peasant family deals with risk another way: specialization of function. The men handle the production activities already described. The women specialize in market activities and are very shrewd barterers. Thus, the family moves to control a part of the market process. The women trade farm products for household items or cash. If they are successful in

trading, they may gain a small surplus and set up as traders. A small stock of goods is bought and then traded at a profit, which is reinvested in trading activities.

The trader provides a variety of market services, including retail, wholesale, transport, processing, storage, bulking, or breaking bulk. She is often in informal partnership with one or more truckers. The trader will buy a large sack of salt and resell it in smaller quantities. That breaking bulk is a valuable service may be seen readily, for the customer could easily buy from the trucker, who is only a few feet away. The unit price would be lower, but the minimum quantity much greater. Access to the truck also permits the trader to profit by arbitrage, as she may now visit several market sites in nearby villages.

The traders are essentially monopolistically competitive. Those who trade in a particular commodity will cluster together in a market. This allows more close attention to the actions of others, preventing sudden price changes which impose external costs on the other traders. However, there is more than one price in the market. A form of price discrimination along a highly elastic demand curve occurs. Favored customers are given price discounts or overages on weight in order to retain their business. A trader builds product differentiation in this way and reduces the risk of losing a customer later, when a product may be in short supply and prices higher.

The traders survive essentially on their wits. They favor less market regulation and centralization. However, not all buyers of the peasants' goods see the situation in the same way. The licensed buyers of export products prefer as much market centralization as possible. Unlike the traders, the export buyers tend to be in close partnership with the political machinery. Government officials prefer centralized markets, for this simplifies the collection of taxes levied on buyers in the market or of charges to sellers for the use of stalls or places for tying livestock and draft animals. It also allows easier intelligence gathering and control of the populace.

Licensed buyers prefer the central market, for they are in a monopsony position. There may be many small sellers but only a few relatively large buyers of beeswax, sisal, and coffee for export. This group of merchants has often been powerful throughout Haiti's unstable political history. Since Papa Doc's time, the merchants have been able to defend their position of political and economic power. To maintain market control, they will send people out to buy on the farm, not in the smaller markets, when supplies are short, thus avoiding the necessity of raising the price paid.

The combined political and economic power of the merchant class gives it considerable property rights in the market itself. (Similar power of the merchant class may explain the current expulsion of the Chinese from Viet Nam.)

The situation is not unlike what transpired in U.S. agriculture. One incident of intense market–property rights conflict occurred in the immediate post–Civil War period. A more sophisticated debate about the proper organization of agriculture has continued from the 1950s to the present. This latter debate involves the issue of complete property rights.

*U.S. Agriculture:*

*From Competition to Public Utility*

Agriculture has been the industry most economists use as the real world example of competition. However, the history of agriculture has been one of trying to avoid the problems of the instability imposed by competition and other uncertainties. A thorough search of the literature would be beyond the scope of this article, but a few references will illustrate the characteristics presented in the model.

In the post–Civil War South, former slaves possessed agricultural skills but lacked land. Former plantation operators were in a position to rent land to those willing to work it. Under competitive conditions, the landlord would rent to the tenant willing to pay the highest rent. The tenant would search for low-rent land, *ceteris paribus*, leave a landlord who charged high rents and seek another, or take nonagricultural employment. By the 1890s, the competitive market no longer worked this way due to legislation favoring landlords, which allowed them complete control of the market.<sup>16</sup>

Prior to 1890, recruiters would seek laborers for landlords or industrial interests, some in the northeast. The landlords responded with the crop lien law, which limited competition for labor. Tenants and even farm owners soon found themselves locked into a situation from which they could not escape and in which they had no bargaining power. The landlord set the terms and collected the crop at the end of the year. If the tenant also bought supplies at the company store, the debt could become even larger. The tenant never knew what his crop was worth or what he was paying for supplies and food. If a tenant fled, no other landlord would take him on, as the former landlord could enforce the lien against the new landlord. Thus, the landlord could set the price he wanted. He could even direct the cropping pattern to provide the cotton he preferred rather than

the food and livestock the tenants favored. As a result, the tenant was essentially hired labor on the land.<sup>17</sup>

An interesting feature of the period was the growth of the Southern Farmers' Alliance, which spread from Texas across the entire South in the 1880s. It was an organization to give bargaining strength to the tenants and small landowners against the landlords and merchants in their struggle to divide the cotton crop. But the landlords were also involved in the alliance, which opposed the actions of the railroads and the mercantile interests in the northeast. Since part of the program of the organization was educational, these conflicting elements held together a while, but economic interests eventually won out. The alliance could not resolve the economic conflict between landlord and tenant, and it fell apart when the Populist Party began its rise after 1892.<sup>18</sup> It would seem that a grand coalition of irreconcilable interests cannot be obtained.

Since the late 1930s, government policy has affected U.S. agriculture in many ways. The argument for intervention has always been stabilization of prices, but the emphasis of the debate changes. At present, it centers on the welfare losses or gains from stabilization of prices and publicly owned buffer stocks. There may be different losses or gains depending upon supply and demand elasticities, the source and magnitude of the instability, and the time required to reach equilibrium again. But since the welfare gains are greater than the losses, at least conceptually, compensation could take place. With foreign trade, the results are not so clear, but farm product price stabilization seems a generally defensible economic policy.<sup>19</sup>

In the 1950s, agricultural economists and industry representatives favored stabilization in the form of having the government become a partner in guaranteeing the value of farm products or farm income. Through production control and marketing regulations, the farmer would have a property right in the value of his output.<sup>20</sup> This right has become so strongly entrenched that the dairymen, formerly leaders in most farm strikes for higher prices, were not very active in the 1977 farmers' strike. In that year, dairymen sold 96.3 percent of the pounds of milk produced as highly profitable whole milk; 95 percent of this was sold under a federal milk marketing order or under state control laws. Dairymen have managed through their cooperatives to gain control of their markets for milk and in many markets are able to set the prices they receive, thus making participation in the strike unnecessary.<sup>21</sup>

It has already been pointed out that production allotments enabled the extension of property rights to mean that persons could capitalize the

future. Crop allotments are typically assigned to the farm, not the farmer. Since there is a difference between the market price of the commodity and the support price with allotments, the future stream of differences can be capitalized into the value of land. In one study in North Carolina in 1957, the tobacco allotment was worth \$2,500 per acre. In another area of the state, over the years 1956 to 1959, the tobacco allotment was worth \$1,139 per acre, the peanut allotment was worth \$669, and the cotton allotment was worth \$463.<sup>22</sup> Corn allotments added virtually nothing, as little corn was grown in the area.

Mason Gaffney has pointed out that the clear beneficiaries of farm programs are not the farmers, unless they are owner-operators. Farm laborers and tenants do not benefit unless the tenant has secured rights through a long tenure leasehold at the time the support price is enacted. The programs are biased in favor of land-using crops such as corn, wheat, cotton, rice, and other cash grains. They also are biased in favor of landowners, since only one resource is idled in return for cash payment, which clearly shifts the terms of trade in favor of land. Landowners may be more politically powerful than farmers. In 1978, 40 percent of U.S. farmland was owned by nonfarmers, including movie stars, corporations, executives and other high income professional people, bankers, and oil-rich Arab sheiks. Thus, the higher land value resulting from the capitalization of future income does not necessarily benefit farmers, even though the guarantees are usually called farm programs.<sup>23</sup> Varden Fuller also argues that political pressure has redistributed income in favor of (large) landowners and away from owners of agricultural labor. Farm leaders tend to be the landowners, so when the farm organizations lobby for legislation, they tend to give only token support to the positions of the tenant and farm laborer.<sup>24</sup>

### *Levels of Property Rights Are Not Discrete*

The movement from the tragedy of the commons to complete property rights should not be viewed as a series of discrete and mutually exclusive steps. Instead, the levels are points along a continuum. Several examples could be given, but a familiar one will suffice. Union members and professional associations have been able to establish job rights and set the value of the services offered. However, they are not able to capitalize the value of the future income stream since they deal mainly in a service. They are able to make new entrants pay for the higher future earnings by charging them high initiation fees or by seeing that their earnings are low during a long period of apprenticeship. They are also able to transfer some of the higher

earnings to future generations, since children of members are more likely to be able to enter the cartel. This seems to be especially the case in the medical profession.<sup>25</sup>

### *Brave New Worlds, or Complete Property Rights*

As we move toward more complete property rights, we once again lose the workings of the market. Even in agriculture there are arguments for treating the industry as a public utility. In the 1950s it was maintained that the industry was too important to be left to the market, with its accompanying low supply and demand elasticities, rapid technological change, and monopolistic suppliers of inputs and monopsonistic purchasers of output. In addition, massive infusions of public monies into agricultural research and education were treated as *prima facie* evidence that the farm public utility was a *fait accompli*.

Agriculture would be different from most public utilities, as many firms are involved. Utilities usually are regulated because (1) competition cannot exist for technological reasons; (2) competition could or does exist but competitive results do not obtain, or (3) competitive results do obtain, but other economic or social criteria are unsatisfactory. Firms granted public utility status usually provide (1) continuous or at least repeated service through relatively permanent producer-consumer relationships or (2) transport services. The earlier arguments for agriculture as a public utility focused upon item (3) in the first list and item (1) in the second.

More recent arguments for agriculture as a public utility focus on the need to stabilize prices and incomes in an increasingly unstable world. In some cases, it is argued that it is the consumer who needs protection from the instability of the free market. Regulation would be pointed at food processors and retailers rather than farmers. This may be an example of a group reaching backward to establish property rights in a prior stage of production. This latter argument focuses on the second reason for the regulation of public utilities listed above.<sup>26</sup>

### *Complete Bureaucratization*

Finally, we move beyond the case of firms regulated by a bureaucracy to one in which the bureaucracy provides the service or product. Complete property rights would prevail, for resources would be allocated collectively, with no market intervention. Both the Soviet Union and the United States face the same results when bureaucrats make decisions.

Bureaucrats presumably maximize the budget of their bureau, given demand and cost conditions, subject to the constraint that the budget must equal or exceed minimum costs at equilibrium output. The bureaucrats' utility function, including salaries, perquisites, public recognition, power, patronage, ease of managing the bureau, and ease of change, are all monotonically increasing functions of the bureau budget. Even bureaucrats dedicated to the public interest will tend to increase budgets.

Furthermore, bureaus tend to offer an output or package of outputs, not on a per unit basis, but on an as-is basis, in exchange for a lump-sum budget. All consumer surplus can be extracted even more efficiently than a discriminating monopolist can extract it, although a bureau will produce a larger output than either the competitive or monopoly profit-maximizing firm. Thus, both profits and consumer surplus are driven to zero by the bureau. Owners of some factors of production sold to the bureau may be able to extract some surplus from the bureau, but resource allocation remains suboptimal compared with market allocation.<sup>27</sup>

### *Conclusions*

The basic premise of this article is that the market serves as a commons and that a relatively free market is necessary for the efficient implementation of private or social property rights. The property rights debate perforce involves the market structure debate. The theoretical use of property, the institutional boundaries of property, and the specific social implementation of property rights are all important in understanding the means by which we enforce property rights and the ends—efficiency, equity, equality—that we as a society may be trying to achieve through the creation of property.

The argument may sound simple, and, indeed, it is. But much of the property rights debate ignores the evolutionary nature of property and the rights associated with it. Implementation of complete property rights, particularly in the area of externalities, often requires small numbers and the effective bilateral monopolization of the trading agreement. While the resource efficiency of the trade may be improved, it is at the sacrifice of the creation of a market and the resultant consumer surplus.

Historically, property rights have not been a homogeneous good. Several different stages of property rights, often associated with different types of markets, can be identified. Sometimes the expansion of the property rights will improve market structure and market efficiency; at other times there is an obvious property rights–market efficiency trade-off. Since property rights basically augment security for society, increasingly com-

plete property rights will, beyond some point, tend to reduce market efficiency.

Property rights should be considered part of the institutional environment of the economy. In and of themselves, their meaning is limited, but as part of society's rules for the implementation of its production system, they are a means by which society tries to balance or attain its several economic goals—stability, equity, and efficiency.

### Notes

1. See Ronald H. Coase, "The Problem of Social Cost," *Journal of Law and Economics* 3 (April 1960): 1–44; Harold Demsetz, "Toward a Theory of Property Rights," *American Economic Review* 57 (May 1967): 347–59; and Eirik Furubotn and Svetozar Pejovich, "Property Rights and Economic Theory: A Survey of Recent Years," *Journal of Economic Literature* 10 (December 1972): 1137–62. We include Coase in this list recognizing that the intent of his article and the interpretation given it by the Chicago School are different. It is the latter we are addressing. We thank William Breit for calling our attention to the distinction.
2. See A. C. Pigou, *The Economics of Welfare*, 4th ed. (London: Macmillan, 1932); Richard Musgrave, *Public Finance* (New York: McGraw-Hill, 1959); and Francis Bator, "The Anatomy of Market Failure," *Quarterly Journal of Economics* 72 (August 1958): 351–79.
3. Coase, "Social Cost."
4. Demsetz, "Property Rights."
5. Garrett Hardin, "The Tragedy of the Commons," *Science* 162 (December 1968): 1243–48.
6. E. G. West, "The Burdens of Monopoly: Classical vs. Neoclassical," *Southern Economic Journal* 44 (April 1978): 829–45.
7. Coase, "Social Cost."
8. Richard Posner, *Anti-trust Law: An Economic Perspective* (Chicago: University of Chicago Press, 1976), pp. 14–15.
9. David McLellan, *Karl Marx: His Life and Thought* (New York: Harper and Row, 1973).
10. R. A. Gonce, "The New Property Rights Approach and Commons's *Legal Foundations of Capitalism*," *Journal of Economic Issues* 10 (December 1976): 765–98.
11. *Munn v. Illinois*, 94 U.S. 113 (1877); *Brass v. North Dakota*, 153 U.S. 391 (1894); and *Nebbia v. New York*, 291 U.S. 502 (1934).
12. For a background to the multiple motives for public utility regulations, see Harry M. Trebing, "Realism and Relevance in Public Utility Regulation," *Journal of Economic Issues* 8 (June 1974): 209–33.
13. *United States v. United Shoe Machinery Co.*, 247 U.S. 32 (1918); *United States v. United States Steel Corp.*, 251 U.S. 417 (1920); and *United States v. International Harvester Corp.*, 274 U.S. 693 (1927).

14. W. A. Niskanen, "The Peculiar Economics of Bureaucracy," *American Economic Review* 58 (May 1968): 293–305.
15. S. W. Mintz, "Peasant Markets," *Scientific American* 203 (August 1960): 112–22.
16. Michael Schwartz, *Radical Protest and Social Structure* (New York: Academic Press, 1976), pp. 19–25.
17. *Ibid.*, pp. 24–26.
18. *Ibid.*, pp. 91–104.
19. J. P. Houck, "Some Economic Aspects of Agricultural Regulation and Stabilization," *American Journal of Agricultural Economics* 56 (December 1974): 1115.
20. *Ibid.*, p. 1114.
21. E. W. Kieckhefer, "Milk Patterns Changing," *Memphis Commercial Appeal*, Section B, 4 June 1978, p. 8.
22. J. L. Hedrick, "The Effects of the Price Support Program for Peanuts on the Sale Value of Farms," *American Journal of Agricultural Economics* 44 (December 1962): 1749–53.
23. Mason Gaffney, "The Benefits of Farm Programs: Incidence, Shifting and Dissipation," *American Journal of Agricultural Economics* 47 (December 1965): 1252–53.
24. Varden Fuller, "Political Pressures and Income Distribution in Agriculture," *American Journal of Agricultural Economics* 47 (December 1965): 1245–51.
25. Albert Rees, *The Economics of Trade Unions* (Chicago: University of Chicago Press, 1962), pp. 127–29.
26. Houck, "Economic Aspects," pp. 114–15.
27. Niskanen, "Economics of Bureaucracy," pp. 293–98.