

### Property Rights and Economic Efficiency

### **Chapter at a Glance**

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Overuse of Resources with Poorly Defined Property Rights
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### **Chapter Overview and Topics for Discussion**

Public sector economics books with a separate chapter devoted to property rights are relatively rare, and much of this chapter could be skipped by those instructors less interested in public expenditure theory, or by those who are less interested in using a property rights foundation to introduce the ideas of market failure, externalities and public goods. The section on the Coase theorem probably should be discussed, even by those who want to skip the rest of the chapter. The Coase theorem is a prominent part of public finance theory. Also, reference to the Coase theorem is made in several following chapters.

Although it is unusual to have a separate chapter devoted to property rights, using this chapter as an introduction to market failure helps illustrate that in a world of perfectly defined property rights and no transactions costs the most commonly discussed problems of market failure in public finance theory would not exist. This suggests policy measures oriented toward establishing and enforcing property rights rather than Pigouvian taxes, regulation, and government production. While the Pigouvian tradition, covered in Chapter 4, was developed decades before the analysis of property rights became a major issue in economics, the property rights issues do seem to be logically antecedent to cases in which transactions costs are prohibitively high and where property rights cannot be clearly defined except at very high cost.

Skip ahead to the Coase theorem to cover just the main idea in the chapter. But there are some interesting topics and concepts that can help lend insight into the reasons why markets fail to allocate resources efficiently, so this is a good chapter to cover in more detail if time permits. Also, students are interested in these ideas, especially as they relate to protecting the environment.

#### Property Rights

A property right, like any other right, gives an individual the right to engage in specific types of behavior. Owning a house or a car, for example, does not mean you can do anything you want with your house or car. Along with rights come obligations, such as the obligation of property owners to pay property taxes.

The efficiency of markets relies on clearly defined property rights. When property rights are poorly defined, resources can be allocated inefficiently. Air pollution provides a good example. Because it is unclear who owns the air, the resource tends to be overused.

#### **Application: Endangered Species**

In the 1800s, buffalo were nearly hunted to extinction in the United States, while the cattle population was growing. During that time, the nation was consuming many more cattle than buffalo. But owners had clear property rights over cattle, so they had an incentive to preserve their breeding stock, whereas nobody owned the buffalo. Ownership came only after the animals were killed.

This provides a good example for discussing endangered species today. Endangered species like elephants, whales, bald eagles, and Florida panthers are not owned by anybody, so nobody has an incentive to preserve them. Non-endangered species, like cows, pigs, and chickens, are privately owned. Show students a list of these endangered versus non-endangered species (for example, by writing the two lists on the board) and ask them what the difference is between the animals on one list and the animals on the other. The answer is that nobody owns the animals on the endangered species list, whereas the non-endangered species are all the property of people.

In Zimbabwe, where there are property rights over elephants, populations have grown. They have declined in nations like Kenya where nobody has property rights, and therefore nobody has the incentive to protect them, just like the nineteenth-century buffalo in the United States.

#### The Coase Theorem

The Coase theorem is a key concept, and I would think that most courses would cover it, even if they skipped other property rights material. Students can start reading at this point and get the idea, using the doctor-confectioner example from Coase's paper.

The text makes the argument that for the Coase theorem to work, property rights do not even have to be predefined. De facto, somebody is likely to have the right even if it is in legal dispute (the confectioner in the doctor-confectioner example), but without transactions costs, the individuals have the same incentives to define property rights among themselves as to trade them after they are defined. This idea is at odds with the way that many people view the Coase theorem. If you think that property rights must be predefined in order for the Coase theorem to work, I don't mind if you disagree with the book as you use it.

Small numbers of people will be likely to have low transactions costs, while large numbers of people typify the high transactions cost case. This points toward the next chapter, where the internalization of externalities using Pigouvian taxes is discussed. If people can't bargain out a solution among themselves, then there may be a role for government.

#### **Common Ownership and Government Ownership**

The common pool problem is discussed as another property rights problem, and government ownership is then discussed in order to illustrate that government ownership is not the same thing as common ownership. Both can lead to inefficiencies, but for different reasons, as the text explains.

#### **Property Rights and Entitlements**

This section of the chapter makes the distinction between rights which require only that others observe them, such as rights to free speech and property ownership, and "rights" that imply a claim on the resources of others. A right to health care or to education, for example, implies that others must give up some of their resources in order to provide those rights. To clarify the differences, the term "rights" is reserved for rights that imply no claim over the resources of others, while the term "entitlements" is used to describe those cases in which individuals are given claims to the production of others.

### **Application: Land Use Planning**

Land use planning, including zoning laws, can be viewed as an attempt to prevent spillover costs among property owners. Houston, Texas, provides an interesting case of a city with no zoning laws, in which private contracts, in the form of restrictive covenants, take the place of zoning. This shows an application of the Coase theorem because transactions costs are low enough that individuals can bargain among themselves to internalize these costs. At the beginning of the twenty-first century, most people would agree that market allocation of resources works better than central planning, but land use is one of the areas in the economy where people often argue that central planning is needed to ensure the efficient use of resources. Why is land different from other economic resources? Or is it? Because of increasing government involvement in land use issues, even as laissez faire seems to be generally accepted as a desirable economic principle, land use planning can be an interesting issue for classroom discussion.

### **Answers to Review and Discussion Questions**

#### 1. Discuss the similarities and differences between rights such as the right to free speech and rights such as the right to own a home or a business. How would the right to an education or the right to be free from hunger fit into your categorization of rights?

Rights such as free speech and the right to own property both entitle individuals to engage in certain types of activities. Others are obligated not to violate those rights. Individuals with rights may also have obligations, such as the obligation to pay property taxes, or the obligation not to use slanderous language. Rights to education or freedom from hunger are entitlements, and differ from property rights because they entail a claim on the resources of others. If one person has a right to an education, that right can only be exercised if another person has an obligation to produce the education.

### 2. During the 1800s in the American West, cattle were being consumed in larger quantities than buffalo, yet buffalo were hunted nearly to extinction while the population of cattle grew. Explain how these facts can be reconciled.

Because property rights were clearly defined over cattle, but not over buffalo, cattle owners had an incentive to preserve their breeding stock, while nobody had an incentive to preserve the stock of buffalo.

#### 3. What is the Coase theorem? Under what conditions does the Coase theorem apply?

The Coase theorem states that in the absence of transactions costs, the allocation of resources will be independent of the assignment of property rights. The definition states that it applies when there are no transactions costs, but with low enough transactions costs it still has some applicability. It is more likely to work with small groups than with large groups, for example.

### 4. Give some examples of transactions costs in private markets. How do they inhibit the efficient use of resources? Can you suggest any ways in which these transactions costs might be lowered?

Transactions costs include obvious things like checkout lines at stores, the costs of sales people, and the writing of contracts to govern exchanges that do not occur immediately. Transactions costs will be higher when more people have to agree (a whole neighborhood as opposed to two neighbors). Also, overcoming the lack of information is a transaction cost. Advertising can help overcome this cost, but sometimes potentially profitable exchanges will not be made simply because the parties to the potential exchange are unaware of the opportunity. Many examples, ranging from ATM machines to standard contracts to advertising can be thought of as ways to lower transactions costs. This question is included not so much to get students to remember material from the chapter as to get them to think about the concept of transactions costs.

### 5. Why are transactions costs important in assessing the appropriate public policy for dealing with a poorly defined property right? Exactly what is meant by *transactions costs* in this context? What factors will affect the level of transactions costs?

If transactions costs are low, inefficiencies resulting from poorly defined property rights can be eliminated by exchanges among individuals who value the right. No public policy is needed to deal with poorly defined property rights when transactions costs are low. Transactions costs in this context means any impediment to exchange. Transactions costs will be higher when large numbers of people are involved, when information is not readily available, and when a long-term contract would be required. An almost limitless list of factors might be given.

### 6. Describe the common pool problem. Give some examples and suggest how solutions might be worked out to allocate resources more efficiently.

The common pool problem exists when many individuals own a resource jointly. The problem is that nobody has an incentive to consider the effects of the costs of their use of the resource on the other owners. Common grazing grounds, some animals (elephants, eagles), and the air are examples. The best solutions involve the clear assignment of property rights to an owner.

### 7. What is the difference between common ownership and government ownership of resources? What resource allocation problems exist in each case? How can resource allocation problems be solved in each case?

Common ownership means that many people own something jointly, which leads to the common pool problem. With government ownership, the government dictates how a resource is used, which means that resource use will be determined through a political decision-making process.

### 8. Explain the differences between public ownership and private ownership. Why is it significant that the owners of a private firm can sell the firm, whereas the public firm cannot be sold?

Public ownership means that political decision-making will determine resource use, whereas with private ownership the private owners make those decisions. Because private ownership rights can be sold, the market places a value on private property and provides the incentive for people to maximize the value of their property. The market mechanism also provides a way for ownership to go to those who value resources most highly. With public ownership, there is no market valuation, and those who manage public resources do not have the same market incentives to maximize their value.

# 9. Discuss the difference between a property right and an entitlement. If people are guaranteed the right to free speech, does that also guarantee them the right to a lecture hall or to radio or television airtime? Should the right to free speech entail such guarantees? If people are entitled to be free from hunger, who should have the obligation to feed those who are hungry? What is the role of government in these rights and entitlements?

All that property rights require of others is that the right not be violated. Entitlements require that others produce the entitlement so that those who are entitled can receive their entitlement. Free speech, as a right, does not guarantee command over resources, but some claim that there should be an entitlement to be heard, such as free air time for presidential candidates. Whether entitlements should become rights is an interesting issue for discussion. If people are entitled to be free from hunger, who should have the obligation to feed those who are hungry? Currently, taxpayers have these types of obligations, but it is worthwhile to consider why they should. For an entitlement to be guaranteed, the coercive power of government would have to be used.

## 10. How should a society decide what rights and entitlements individuals should have? If a society provides entitlements to its citizens, is it then the government's responsibility to assign the obligation to produce those entitlements? How should the obligations associated with entitlements be assigned to members of a society?

This question covers a normative issue, so does not have a right answer. Nevertheless, it is worthwhile for students to consider the rights and obligations of others in a society and to recognize that the guarantee of entitlements for some means imposing costs on others.

### 11. Zoning laws are enacted to ensure that land in an area is not put to incompatible uses. Explain how Houston, which has no zoning laws, is able to allocate land use in an orderly manner.

Restrictive covenants are contractual agreements that try to keep incompatible land uses separated. Houston has used restrictive covenants successfully to produce orderly land use and to prevent spillover costs among property owners.