
Lesson 4 - Property Rights in a Market Economy

INTRODUCTION

Economics

All *market economies* have several basic characteristics in common including private property, free enterprise, self-interest, competition, a price system and limited (*laissez-faire*) government. *Property rights*, defined as individual ownership and control of resources and products, are the fundamental characteristic of a market system. Property rights affect the way markets allocate resources.

If property rights are well defined and enforced and markets are competitive, a market system ensures that resources are used in their most valued manner. Private ownership encourages people to take good care of property. It also encourages productive development of property and conservation of resources for the future. This is the beauty of a market economy.

But the “if” is a big one, and, unfortunately, property rights to many natural resources are poorly defined. When property rights are not clearly defined, resources may be wasted or used inefficiently. Therefore, an important role for government in a market economy is to try to ensure that property rights are clearly defined and protected.

Reasoning

Economic reasoning says that people respond to incentives and that the consequences of actions lie in the future. When property rights are not clearly defined, people acting in their own self-interest may respond to incentives that are counter to the long-run objectives of society. Environmental pollution provides many examples of this phenomenon. When students understand this idea, they can then understand the importance of defining and enforcing property rights.

CONCEPTS

Competition
Free enterprise
Limited government
Private property (property rights)
Self-interest
System of markets and prices

CONTENT STANDARDS

4. People respond predictably to positive and negative incentives.
9. Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.
10. Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems and not-for-profit organizations are examples of important institutions. A different kind of institution, clearly defined and well enforced property rights, is essential to a market economy.

OBJECTIVES

Students will

1. Analyze the basic characteristics of a market economy.
2. Participate in or observe an activity demonstrating how property rights affect behavior.
3. Compare resource use when property rights are clearly defined with resource use when property rights are not clearly defined.

LESSON DESCRIPTION

Students discuss private property, free enterprise, self-interest, competition, a system of markets and prices, and limited government as characteristics of market economies. They participate in or observe an activity demonstrating that property rights affect incentives and behavior. They conclude that it is important to have clearly defined property rights so resources are not wasted.

TIME REQUIRED

60 minutes

MATERIALS

1. Visual 4.1
2. 50 paper clips
3. One bag of small candy (or other desirable items such as pennies or extra-credit points) for Round 1 and one bag for Round 2. To be safe, you need 100 items for each round.
4. A roll of masking tape (or a ball of string or yarn)

PROCEDURE

1. Ask students what they believe makes a market economy (also called a *capitalist system*, a *free-market system*, or a *free-enterprise system*) different from the economic system in Cuba or in the former Soviet Union. Write suggested answers on the board.
2. Display Visual 4.1, “Basic Characteristics of a Market Economy.” Tell students that many economists list these characteristics when describing a pure market system. Remind students that although the United States is predominantly a free-market system, all countries have mixed systems to some extent; no economy is purely market, command or traditional. (For an explanation of all these economic systems, see Visual 2.3.) Discuss the characteristics of market systems listed on Visual 4.1.

A. Private Property. A system of private property means that individuals and private businesses, not the government, own most land and capital goods. The right to own private property (property rights) provides incentives to owners to take care of the property and to invest in it and therefore encourages the efficient allocation of resources and economic growth.

B. Free Enterprise. Free enterprise means that, within legal limits, individuals are free to open businesses and to produce and sell the goods and services of their choice. Individuals are also free to work where they want and to buy the goods and services they want with their earnings.

C. Self-Interest. Self-interest drives people to get the best job they can, to get the most for their money and to earn the most profit in their businesses. When everyone does this, resources are used to produce the goods and services everyone wants, which is a desirable outcome. Self-interest is not the same as selfishness and does not mean that people cannot and do not help others. As Adam Smith pointed out in 1776 in his book *The Wealth of Nations*, people acting in their own self-interest are guided as if by an “invisible hand” to do what is best for society as a whole.

D. Competition. Competition keeps prices in line with the costs of production. If one seller raises prices in an attempt to earn excessive profits, competition from other sellers (who also want to earn profits) will drive the prices down. Pure competition assumes that sellers can easily leave one business and easily enter another one. Competition among buyers prevents any one buyer from controlling prices by refusing to buy something.

E. System of Markets and Prices. Markets bring together buyers and sellers of goods and services. In a market system, the forces of supply and demand, not the government, determine prices. If there is a surplus of goods available at the going

price, the price will fall. If there is a shortage of goods available at the going price, the price will rise.

F. Limited Government. Although market economies can operate in most respects without government interference, there are important roles for government to play. At a minimum, government is needed to define and enforce property rights and to provide some goods and services such as national defense that are not provided efficiently by markets. (For an explanation of public goods, see Lesson 5.)

3. Tell the students they will participate in or observe a short activity that focuses on one or more of the characteristics of a market economy. Clear an area in the center of the room at least six feet in diameter with room for students to stand around it. Ask for 10 volunteers for a well-paying job. Display a bag of candy representing the pay.

ROUND 1

4. Ask the 10 volunteers to stand in a circle around the cleared area. Scatter 50 paper clips inside the circle. Tell the students they will be paid to pick up the paper clips. There will be two time periods, each lasting 30 seconds. If they decide to pick up any paper clips during the first 30 seconds, they will be paid one piece of candy for each paper clip. If they decide to pick up paper clips during the second 30 seconds, they will be paid *two* pieces of candy for each paper clip. Students must turn in all the paper clips they pick up at the end of each period. Appoint a student to help distribute the candy in exchange for the paper clips when the time comes, and appoint a student timekeeper to say "Stop!" when 30 seconds are up.

You may want to tell students at this point that the paper clips represent a natural resource such as fish or trees or whales. In the first time period, the fish are smaller and less valuable to society, so the payoff is smaller. In the second period,

the fish are larger and more valuable to society, so the payoff is higher.

A. Begin the first 30-second time period. The student volunteers may talk among themselves about waiting until the second 30 seconds to pick up the clips for the higher payoff, but it is likely that soon someone will start gathering the clips as fast as he or she can, and others will also jump in to pick up the clips. Probably all the clips will be picked up early in the first 30 seconds.

B. Pay the students one candy for each clip they picked up.

C. Run the second 30-second time period even if students picked up all the clips during the first 30 seconds.

D. Pay the students two candies for any clips they picked up in the second period. Make sure you have all 50 paper clips.

ROUND 2

5. Use four long strips of masking tape (or string or yarn depending on the floor) to line the cleared area of the floor in a tic-tac-toe pattern.

Have one student stand in each square, and have the tenth student stand off to the side. Tell the tenth student you are sorry, but in this round not everyone will have the right to collect or fish for the paper clips. Later you can point out that everyone may not be able to own property.

Scatter the 50 paper clips so they fall into the various cells. Make sure a few of the clips lie on the tape so it is not clear which cell they are in.

Tell the students you are going to repeat the game, again paying one candy for each clip they pick up in the first 30 seconds and two candies for each clip they pick up in the second 30 seconds. However, this time people may pick up only the clips in their own cell. Students will probably ask who can pick up the clips that are on the taped lines between the cells. Just shrug in response.

A. Begin the first 30-second time period. This time, students will probably

decide to wait until the second 30 seconds to pick up the clips with the possible exception of the ones on the boundaries. Because they have property rights over their cell – no one else can pick up their clips – they have the incentive to wait for the higher payoff. This reflects the higher value society places on the resource.

B. If any students pick up the clips during the first 30-second period, pay them one candy when the time is up.

C. Begin the second 30-second period. Students will probably pick up most of the clips during this period. Pay the students two candies for each paper clip.

6. Discuss the activity by asking the following questions:

A. Why did people have incentives in Round 1 to pick up the clips during the first 30 seconds even though the payoff was higher if they waited? *If they waited until the second 30 seconds, no clips would have been left: Others, acting in their self-interest, would have already picked them up.*

B. Why did people have incentives in Round 2 to pick up the clips during the second 30 seconds? How were incentives different in Round 2? *In the second round, students could pick up only the clips in his or her cell, so everyone had incentives to wait for the higher payoff, reflecting the higher value society placed on the resource in the second 30 seconds. The resources were private property, which provided incentives to the owners to use them in the best way.*

C. What did students do in Round 2 about the paper clips that fell on the boundaries? *Answers will vary. It is likely that students picked up the clips that fell on the boundaries during the first 30 seconds, since if they didn't, someone else would have. This is equivalent to what happened in Round 1. If students asked you what to do about clips on the boundaries earlier, they were pointing out that the*

property rights to these clips were not clearly defined; and they were asking you, the authority, to define who had the property rights. This emphasizes the need for laws to decide who has property rights when such rights are not clearly defined.

D. If any students in Round 2 picked up the clips in the first 30 seconds (other than the clips on the boundaries), ask them why they did so, since they would have had higher pay had they waited. *Sometimes a few students will say they didn't believe you would really pay them more in the second 30 seconds. This provides an opportunity to discuss the importance of knowing that property rights will be enforced – either by you in the game or by the government in real life.*

E. Imagine that the paper clips were whales, the floor was the ocean and the student volunteers were whale hunters. How can the activity relate to problems of harvesting whales? *In Round 1, when no one had clear property rights, no one had the incentive or right to maintain or control the stock of whales since they couldn't stop others from harvesting them. In Round 2, people had clearly defined property rights to the whales, so there were incentives to manage and control the whale population: in other words, to pick up the clips during the second 30 seconds.*

F. Remind students that there is concern about whales becoming extinct, and there are campaigns to “Save the Whales.” Ask students to think for a minute about the amount of beef and chicken consumed every day. Why aren't cattle and chickens in danger of extinction, along with whales? *Cattle and chicken are privately owned and raised on private property. Ranchers have incentives to raise them and sell them when they bring in the best prices and are most highly valued by society. Ranchers have incentives to maintain their stocks of cattle and chicken, and they*

are able to do so because the cattle and chicken are privately owned. On the other hand, property rights to the ocean are in most cases not clearly defined; so whale hunters have incentives to hunt the whales whenever they can, regardless of the future costs and benefits to society.

G. Ask students to think of other resources for which property rights are not clearly defined. What problems occur as a result? *In many cases, property rights to air and water are not clearly defined. Environmental pollution often occurs in these situations because, in the absence of laws imposed by government, many people and businesses do not have incentives to keep the resources clean, and resources may be abused or overused. To emphasize this point, ask students which is more likely to be polluted: a privately owned lake or a public lake? Noise pollution is another example involving a lack of clearly defined property rights.*

7. **(Optional)** Here are other ideas for conducting this activity.

A. To involve the entire class in the activity directly, students who are picking up the paper clips may choose one or two partners who remain outside the circle so each of the 10 volunteers represents a team of two or three students.

B. You may conduct the activity using an overhead projector, in which case students stand around it and you scatter paper clips on the screen. Use a marker and transparency to divide the screen for Round 2.

C. It may be worthwhile to run Round 1 a second time before running Round 2. Students tend to have even less regard for the “environment” in Round 1 the second time, once they witness how their classmates respond to the incentives.

D. If unexpected outcomes occur in the activity, these often involve property rights. For example, in Round 1 a student

may try to hide paper clips during the first 30 seconds and turn them in for higher pay during the second 30 seconds. The student is demonstrating that he or she has the incentive to break the rules in order to assert property rights over the clips.

CLOSURE

Review and emphasize the major points of the paper-clip activity and relate the activity back to the concepts on Visual 4.1. The activity demonstrates that people have different incentives when property rights are clearly defined (Round 2) compared with when such rights are not clearly spelled out (Round 1). The activity demonstrates the importance of private-property rights in order for resources to be used in the manner most valued by society. People have incentives to act in their self-interest, which usually works to society’s benefit. However, when property rights are not clearly defined (as is frequently the case with natural resources), there is often a role for government to pass laws that decide who has the right to the property or for government to get involved in other ways.

VISUAL 4.1

BASIC CHARACTERISTICS OF A MARKET ECONOMY

A. Private Property

B. Free Enterprise

C. Self-Interest

D. Competition

E. System of Markets and Prices

F. Limited Government