



POWELL CENTER FOR
ECONOMIC LITERACY

Lesson Plan

WRITTEN BY Paul Copley
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Property Rights and Government Intervention

Time Required

2 class periods

Economic Concepts

efficiency
externality
free rider
market failure
wealth redistribution

Overview

Students will develop an economic way of thinking through this teaching unit involving a case study drawn from real life experiences. Students will discover that their answers to economic questions can help to shape a community. In this case study involving a rental housing market, externalities and the rationing function of markets are discussed, as well as the government's potential role in allocating goods and services. This lesson was developed for an AP Economics class and taught after three months of study into market principles, opportunity cost, production possibilities, supply and demand, elasticity, market rationing, and wealth redistribution.

This lesson's primary objective is to provoke students to reflect on whether or not they believe the market has failed in the case study of Nitny vs. the Sheetmetal sisters. As this case illustrates, a market economy that expects and rewards maximizing behavior simultaneously develops socializing rules. In May Lim's response, students recognize that there are some areas in which collective action can have social benefits.

Objectives

- Students understand the economic concepts: price allocation, market efficiency, and externalities.
- Students understand how the government redistributes wealth to help people who are excluded from the market because of an inability to pay.

Collegiate School ★ North Mooreland Road ★ Richmond, Virginia 23229

telephone (804) 741-2806 *facsimile* (804) 740-6701 *www*.powellcenter.org



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- Students use critical thinking skills to develop a resolution for a case study using economic principles.

Materials and Handouts

Handout 1 **Property Rights and Efficiency**

Handout 2 **Three Boys and a Bike: Externality or Not?**

Handout 3 **Case Study: Nitny vs. the Sheetmetal Sisters**

Handout 4 **Sample Class Discussion for the Case Study**

Teaching Activity

Day 1

Introduce students to the concept of allocation function of markets by explaining that the U.S. economy relies mainly on the market system to determine what goods and services are produced, in what quantities and at what prices. It is assumed that individuals, for the most part, make choices based on the costs and the benefits they perceive and on the limitation imposed by their individual budget constraints. Provide Handout 1, **Property Rights and Efficiency**, for the class to read.

Discuss the economic concepts of market failure and externalities with the class. Some markets fail to allocate resources efficiently because all of the benefits and costs of choices are not fully captured by the market. This situation is called market failure. One reason for market failure involves externalities or spillover effects. An externality is a cost or benefit imposed on people other than producers and consumers of a good or service and which is not fully reflected in market prices. Externalities occur only where property rights are poorly defined or poorly enforceable.

An example of a negative externality would be a driver who adds to traffic congestion by choosing to drive during the rush hour. The driver considers only his or her benefits and costs of driving at that time and not the negative externalities of driving at that time. The negative externality is the longer driving time of all other commuters caused by the added congestion — a cost imposed on someone other than the one making the choice. In a world without externalities, the other drivers could pay the new driver to stay off the road, thus reducing congestion. But in the real world, there is no such market where the cost of an additional driver is reflected in prices.

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An example of a positive externality would be when a person chooses to get a flu shot. The person gets the flu shot to avoid getting the flu, but others benefit when this person gets the flu shot because the flu is now less likely to be spread to them. The benefit to those not getting the flu shot is considered a positive externality — a benefit gained by someone other than the person making the choice. The government often attempts to correct for externalities by developing mechanisms for including the external costs and benefits in the consumer or producer's decision.

Next distribute Handout 2, **Three Boys and a Bike: Externality or Not?**, to the class. Ask students to read the material; then discuss as a class.

For homework, instruct students to read Handout 3, **Case Study: Nitny vs. the Sheetmetal Sisters**. Ask students to reflect and write a position paper in preparation for class discussion. Instruct students to consider the following questions:

1. Has the market failed?
2. Does an externality exist?
3. Is government intervention called for in this case? By whom and to satisfy what motive?

Day 2

Lead a class discussion on the positions students took in their papers about the case study. Students should defend their positions. They should apply theory to defend their positions and use market diagrams when useful. Some students may work through market supply/ demand diagrams, elasticities, ceilings, floor price intervention, and positive and negative externalities. This lesson can be taught requiring diagrams or without diagram expectations.

Next, distribute Handout 4, **Sample Class Discussion for the Case Study**, and introduce May Lim's compromise position. Use Handout 4 to initiate further discussion.

Handout 1
Property Rights and Efficiency
By Paul Heyne

Many exchanges are simple and straightforward. Two boys who trade a basketball for a baseball glove are reallocating society's resources. In doing so, they make the overall economy more efficient by making two people happier and no one sadder. The trade is easy because there are only two people involved. Other cases are less simple.

Suppose Jean owns an apartment building that Jill wants to buy and convert into an office complex. Would this be an efficient move? Jean doesn't think so, which is why she continues to rent space to residential tenants. But Jill thinks the building would be worth more as an office complex. Who will win the argument?

There probably won't be any argument. Jill will decide what she expects the building to be worth to an owner who has converted it to offices, and Jean will decide what the building is worth to someone who keeps it as apartments. Both will calculate their valuations in the common denominator of money. If Jill's valuation is higher, Jean will sell to Jill and the building will become an office complex. If Jean's valuation is higher, Jill won't be able to meet Jean's asking price and the apartment building will remain.

Where property rights are clearly defined, people don't argue about what is more efficient: Owners decide. And those who disagree can become the new owners by backing their opinions with sufficient money.

But now let's complicate the story. What about the tenants in Jean's apartment building? What if they want to continue living where they do now? Then they must offer to pay enough additional rent to Jean to make the building more valuable as apartments than as offices. And if they can't afford that? Then they cannot demonstrate, in the way that counts, that the building is indeed more valuable when kept in its present use. What counts are monetary bids offered to the owner.

If that strikes you as heartless and mercenary, you might want to think about it a little longer before coming to a final conclusion. This is the way in which we settle the allocation of most resources in our society. We let owners decide and we require those who disagree to purchase the property rights if they want to override the owners' decisions. This system for settling the allocation of resources has become the dominant system, the system most people prefer to use, because it holds down transaction costs. It substitutes clear and quick exchanges for murky and prolonged committee meetings.

Keep in mind, however, that every exchange takes place within a framework provided by the laws of the land and other relevant rules of the game. Most cities have zoning laws, for example, that rule out certain uses of property no matter what the owner decides. Moreover, the members of a society can and often do use the political process to change the rules of the game in order to promote some outcome that they think they prefer. This is especially common in the case of real estate transactions. Governments at all levels, in

the name of many worthy-sounding goals, have passed a great variety of laws to set restraints on how owners may use their land or buildings. They have, for example, prohibited the conversion of buildings from one use to another, either absolutely or by imposing expensive conditions on the conversion. Such legislative acts create new property rights even while they are restricting or abolishing others. And they alter the allocation of resources.

Here is an interesting example reported on in 1987 by *The Wall Street Journal*. A New York City developer had to construct a 31-story office tower in Manhattan around a brownstone on the building site, because a single tenant refused to move. The tenant took advantage of New York City landlord-tenant laws that prohibit owners from evicting tenants, even when they have sold the building for another use. The developer, who evidently underestimated the tenant's attachment to that site, offered her the choice of other apartments and eventually a cash offer of \$650,000 to relocate, but she would not budge. And because she would not budge, the apartment building could not be torn down. The tenant had a property right, created by the landlord-tenant laws, and she exercised it. She demonstrated by her actions that she placed a lower value on living three blocks away with an additional \$650,000 in the bank, than she placed on continuing to live in her four-story brownstone without that \$650,000.

Whatever you want to call the result, you can't properly call it inefficient. You could, if you wished, criticize the landlord-tenant laws that created this particular tenant's property rights. But that would require a more complicated argument than a simple charge of inefficiency. It would require us at minimum to take into account questions of fairness and to ask about the long-run consequences of laws that arbitrarily alter the property rights of owners.

The Economic Way of Thinking 8/c by Heyne c. 1997. Reprinted (with slight revisions) by permission of Pearson Education, Inc., Upper Saddle River, NJ 07458.

Handout 2

Three Boys and a Bike: Externality or Not?

In each case below, actions by two people (Andy and Bill) adversely affect a third party (Charlie), but only two cases represent externalities. Externalities only occur where property rights are poorly defined or poorly enforceable.

Case 1: Charlie has been saving money to buy Andy's bike for \$50, and Andy says that he'll accept that if no better offers come along. In the meantime, Bill offers Andy \$75 and gets the bike. Charlie is deeply disappointed.

This is not an externality. Property rights are well-defined and enforceable. Andy owns the bike and can sell it as he wishes. Charlie wanted the bike, but in monetary terms, Bill wanted it more.

Case 2: Andy, Bill, and Charlie share a bicycle, with the understanding that each will take care of it and share maintenance costs. Andy and Bill leave the bike in the rain, causing it to rust. They say if Charlie won't share in the repair costs, they'll just leave the bike damaged.

This is an externality. Property rights were not well-defined. The boys hadn't adequately assigned responsibility for damage, so Andy and Bill were free to reduce Charlie's economic well-being.

Case 3: Andy and Bill own a bicycle in excellent condition. Charlie offers to buy it for \$100; Andy and Bill take the \$100 and agree to deliver it in its current condition. On the way over, they ride the bike over rough trails and badly damage the wheels. Charlie protests, but they drop the bike at his feet. Charlie can't prove that the damage occurred after the sale and has no recourse.

This is an externality. Property rights were well-defined, but they proved unenforceable. Clearly, Andy and Bill were liable for the damages, but Charlie could not collect.

Subsidies: Two Motives

In any of the three cases above, a government could use subsidies to alleviate the perceived problem — but the motives would differ. In Cases 2 and 3, the government could, in the name of economic efficiency, tax Andy and Bill and subsidize Charlie's repairs. In Case 1, the government could tax Andy and Bill \$25 and give Charlie a \$50

subsidy to bolster his offer for the bicycle (Charlie's \$100 offer would then win over Bill's \$75 offer). With no externalities, though, the motive here is not economic efficiency; this subsidy would be politically or socially motivated (e.g., the government thinks Charlie is a more deserving individual than Bill).

Real-life subsidies can be similarly motivated by either economic or political/social concerns. For example, subsidies for pollution control devices might be motivated by a desire for economic efficiency — to reverse the effects of an externality. Subsidies to enable poor people to purchase homes would more likely have political or social motives — to alter the distribution of wealth across people.

Handout 3
Case Study:
Nitny vs. the Sheetmetal Sisters

Poor Helen and Freeda Sheetmetal. They are widowed sisters in their early 80s. They currently are in their 14th year of residence in a comfortable but unpretentious apartment in northwest Portland. Their monthly incomes are \$530 for Helen and \$830 for Freeda. Neither worked, and upon the deaths of their husbands, they inherited the Social Security checks that account for all their monthly incomes. They have no other assets save their personal belongings.

The sisters' rent is \$600 per month. It has gone up only 10 percent in three years. Fred Nitny, who has owned the building for eight years, has joined with three other builders on the block to convert each apartment building into condominium residences. Nitny's cost of conversion will be sizable — \$45,000 per unit. After the conversion, Helen and Freeda are given 90 days to finance the \$130,000 condo price. Included in the purchase price is Nitny's willingness to find alternative housing during the renovation at the rental price.

Alas, with no assets, Helen and Freeda cannot qualify for any private loan. In two weeks they will have to pack up. Activists encourage the sisters to join a group comprised of 175 other elderly people who, like them, are being "forced out" by the condo conversion. This group appeals to city authorities to stop Nitny and the other builders from decreasing the supply of low-cost rental housing units.

On the other side of the issue, Nitny and the other property owners have joined with prospective tenants and local merchants to support the condo conversion.

Handout 4 Sample Class Discussion for the Case Study

Students may be strongly in favor of supporting Nitny's right to sell or the Sheetmetal sisters' right to affordable housing. However, in this sample discussion, student ambivalence is evidenced immediately in Kate's response.

Kate: I see an issue of fairness, but how can we fault Nitny? It's his property. They both have rights. The ladies need a decent place to live, and Nitny has the right to make a profit.

Abby steps in: I agree it's not his fault, but he should be the first to step forward.

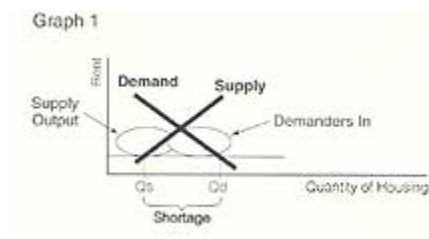
Ray responds: I agree the old ladies are out of the market, but it is because of their low income, not because Nitny has done anything wrong.

David: The ladies do not deserve any assistance. They can find some other place to live.

Paula retorts: Right David, they can find a box on the street. That's the problem with you — you care more about money than people's welfare.

David: Where are the externalities, Paula? The Sheetmetals are not innocent bystanders. They are low-end buyers in a housing market; people get what they can afford. No way should the city help; otherwise we will have bums moving in to take advantage.

John, who has been drawing diagrams between conversations with David, pops up to the chalk board and draws a classic rent control market diagram like the one depicted in Graph 1:



With rents set below market equilibrium, the textbook result is a Q_s to Q_d shortage; suppliers leave the housing market because of the below-market-equilibrium rent, while there is an increase of renters drawn in by the lower-than-market rents.

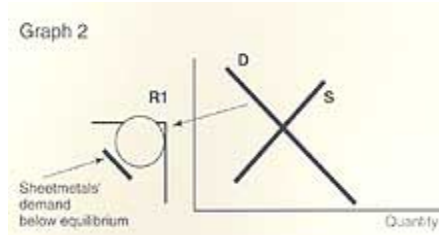
David moves in to help John explain the diagram.

David: The sisters get a free ride, while others in the housing market can't find units.

Abby responds: David, that is not a "free ride," because the sisters are paying their way the best they can. The government should not help them by freezing rents. That could be why Nitny is getting out, but the government should subsidize their incomes.

Ask the students which methods they would prefer: limiting rent or giving income subsidies to low-income renters.

Abby and Mark go to the board, and the class works together to make the distinction in Graph 2:

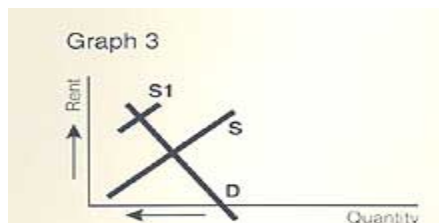


Government subsidy rations in supply for Sheetmetals lifting their demand line to market equilibrium.

Abby's augmenting the sisters' housing income increases the sisters' income, giving them the ability to re-enter the housing market. This will result in higher rents and a greater supply of apartments. John's graph (Graph 1) illustrates that establishing rent ceilings leads to a shortage in the rental housing market. The city could also consider restricting all conversion of rental apartments or increasing the supply of low-income units by purchasing or constructing low-rental units. If the city purchases or constructs rental units, the price would be lower and the city would be in the housing business — responsible for maintenance, etc. David is still not satisfied with these potential solutions.

David: I still don't see the justification.

Paula heads to the board and explains to David that it is Nitny and his colleagues who are — as she puts it — "messing up the rental market." In Graph 3, Paula draws the decreased supply of units due to the conversion, rationing the sisters out of the housing market.



In this case, it is not clear that government intervention is needed. David is right; no direct negative externalities exist. But another student, May Lim, takes the class in a unique direction.

Agreeing with David that no negative externalities justify help for the sisters, and that housing is not a public good by nature, May Lim also agrees with Paula that Nitny was changing the market and that some government response was called for.

May Lim suggests: Fred's improvements to the apartments should raise community property values thereby giving the neighborhood positive externalities, while the sisters and other low-income residents, unable to buy the condos, pay an indirect cost of this rise in value as they are rationed out on the street. The city should enter the market to ease the burden by subsidizing the elderly. This is rationalized by the higher property values (the positive boost in value enjoyed by those not immediately involved in the market), and the increased revenue to the city and county that follows. The city should subsidize the displaced residents with no-interest loans that would allow them to purchase their apartment (now condo). The city would be co-owner and would inherit the unit upon the passing of the subsidized person(s). The builders and Nitny would be obligated to buy back the condo from the city at market price. Everyone benefits and the true costs more closely reflect the social benefits.

May Lim's suggestion, subsequently integrated into her paper on this unit, creates a hybrid of output and process solutions. The government's co-authored loan is short-term, a transition cost for the sisters. A number of students inquire how she came up with this approach.

May Lim: I knew the Sheetmetals were harmed, but I couldn't blame Nitny. So I thought that those needing to pay were those who benefited the most — all the landlords collectively through increased property taxes and the city in general with increased taxing capacity.

May Lim had led the class to see that a satisfactory solution for both parties is served when substantial agreement can be reached, justifying government subsidies on behalf of the harmed individuals.