

**PEARSON NEW INTERNATIONAL EDITION**

**Law and Economics**  
**Robert B. Cooter Jr. Thomas Ulen**  
**Sixth Edition**

# Pearson New International Edition

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***BOOMER v. ATLANTIC CEMENT CO., INC.* 309 N.Y.S.2d 312,  
257 N.E.2d 87 (Court of Appeals of New York, 1970)**

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BERGAN, J. Defendant operates a large cement plant near Albany. These are actions for injunction and damages by neighboring land owners alleging injury to property from dirt, smoke and vibration emanating from the plant.

[At the trial court and on appeal, the defendant's cement-making operations were found to be a nuisance to the plaintiff-neighbors. Temporary damages were awarded, but an injunction against future dirt, smoke, and vibration from the plant causing the same or greater harms was denied. Plaintiffs have brought this appeal in order to receive the traditional remedy against a nuisance—an injunction.]

The ground for denial of injunction . . . is the large disparity in economic consequences of the nuisance and of the injunction. This theory cannot, however, be sustained without overruling a doctrine which has been consistently reaffirmed in several leading cases in this court and which has never been disavowed here, namely, that where a nuisance has been found and where there has been any substantial damage shown by the party complaining, an injunction will be granted.

The rule in New York has been that such a nuisance will be enjoined although marked disparity be shown in economic consequences between the effect of the injunction and the effect of the nuisance . . .

The court at Special Term [the trial court] also found the amount of permanent damage attributable to each plaintiff, for the guidance of the parties in the event both sides stipulated to the payment and acceptance of such permanent damage as a settlement of all the controversies among the parties. The total of permanent damages to all plaintiffs thus found was \$185,000 . . .

This result . . . is a departure from a rule that has become settled; but to follow the rule literally in these cases would be to close down the plant at once. This court is fully agreed to avoid that immediately drastic remedy; the difference in view is how best to avoid it. [Footnote by Court: Atlantic Cement Co.'s investment in the plant is in excess of \$45,000,000. There are over 300 people employed there.]

If the injunction were to be granted unless within a short period—e.g., 18 months—the nuisance be abated by improved techniques found, there would inevitably be applications to the court at Special Term for extensions of time to perform on showing of good faith efforts to find such techniques. The parties could settle this private litigation at any time if defendant paid enough money and the imminent threat of closing the plant would build up the pressure on defendant . . .

Moreover, techniques to eliminate dust and other annoying by-products of cement making are unlikely to be developed by any research the defendant can undertake within any short period, but will depend on the total resources of the cement industry nationwide and throughout the world. The problem is universal wherever cement is made.

For obvious reasons the rate of the research is beyond control of defendant. If at the end of 18 months the whole industry has not found a technical solution, a court would be hard put to close down this one cement plant if due regard be given to equitable principles.

On the other hand, to grant the injunction unless defendant pays plaintiffs such permanent damages as may be fixed by the court seems to do justice between the

contending parties. All of the attributions of economic loss to the properties on which plaintiffs' complaints are based will have been redressed. . . .

It seems reasonable to think that the risk of being required to pay permanent damages to injured property owners by cement plant owners would itself be a reasonably effective spur to research for improved techniques to minimize nuisance . . . . Thus, it seems fair to both sides to grant permanent damages to plaintiffs which will terminate this private litigation. . . . The judgment, by allowance of permanent damages imposing a servitude on land, which is the basis of the actions, would preclude future recovery by plaintiffs or their grantees.

This should be placed beyond debate by a provision of the judgment that the payment by defendant and the acceptance by plaintiffs of permanent damages found by the court shall be in compensation for a servitude on the land.<sup>60</sup>

The orders should be reversed, without costs, and the cases remitted to Supreme Court, Albany County, to grant an injunction which shall be vacated on payment by defendant of such amounts of permanent damage to the respective plaintiffs as shall for this purpose be determined by the court.

JASEN, J., dissenting. I agree with the majority that a reversal is required here, but I do not subscribe to the newly enunciated doctrine of assessment of permanent damages, in lieu of an injunction, where substantial property rights have been impaired by the creation of a nuisance. . . .

I see grave dangers in overruling our long-established rule of granting an injunction where a nuisance results in substantial continuing damage. *In permitting the injunction to become inoperative on the payment of permanent damages, the majority is, in effect, licensing a continuing wrong. It is the same as saying to the cement company, you may continue to do harm to your neighbors so long as you pay a fee for it.* [Our emphasis.] Furthermore, once such permanent damages are assessed and paid, the incentive to alleviate the wrong would be eliminated, thereby continuing air pollution of an area without abatement.

It is true that some courts have sanctioned the remedy here proposed by the majority in a number of cases, but none of the authorities relied on by the majority are analogous to the situation before us. In those cases, the courts, in denying an injunction and awarding money damages, grounded their decision on a showing that the use to which the property was intended to be put was primarily for the public benefit. Here, on the other hand, it is clearly established that the cement company is creating a continuing air pollution nuisance primarily for its own private interest with no public benefit. . . . The promotion of the interests of the polluting cement company, has, in my opinion, no public use or benefit. . . .

I would enjoin the defendant cement company from continuing the discharge of dust particles on its neighbors' properties unless, within 18 months, the cement company abated this nuisance. . . .

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<sup>60</sup> A *servitude on the land* is a restriction or burden on a piece of real property. The servitude typically "runs with the land," which means that it becomes permanently attached to the particular piece of land and is not, therefore, dependent on the identity of the owner. In your discussion of the case, see if you can explain why the court wishes to make the obligation to pay permanent damages for the nuisance a servitude on the land rather than being a mere obligation to pay particular individuals.

**QUESTION 31:** Is the externality in *Boomer* private or public?

**QUESTION 32:** Are the transaction costs of bargaining among the parties low or high?

**QUESTION 33:** Suppose the households had a right to enjoin the cement company to stop polluting. What obstacles would the cement company face if it tried to purchase the right to pollute from the households?

**QUESTION 34:** Explain the remedy given by the court. Suppose that at some time in the future the cement company doubles its rate of output, thus increasing the noise, smoke, dust, and vibration inflicted on the neighbors. Do the homeowners have a remedy?

**QUESTION 35:** Contrast the difference between temporary and permanent damages on the incentives of people to build new houses near the cement factory.

**QUESTION 36:** To what extent can the private law of property solve the problem of pollution?



#### Web Note 8

See our website for an additional case and some additional questions on using nuisance law to correct externalities. We also summarize there some new literature on the choice between property and liability rules as remedies.

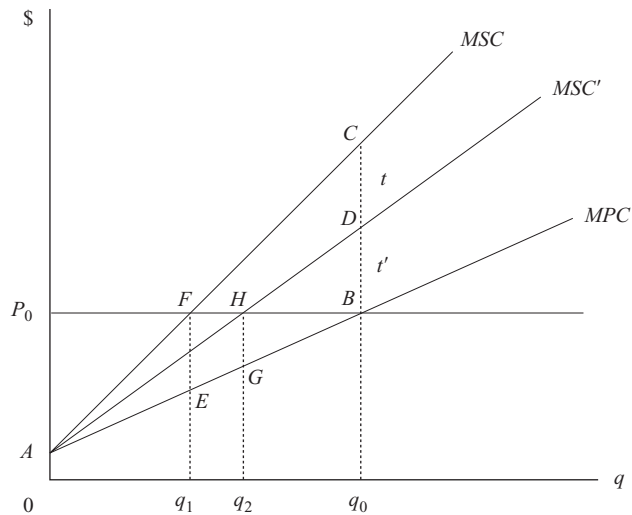
The companion website for this chapter can be found under “Law and Economics, 6/e,” at [http://www.pearsonhighered.com/cooter\\_ulen/](http://www.pearsonhighered.com/cooter_ulen/).

## C. Graphing Externalities

Let us graph how the award of damages can internalize an externality and restore efficiency. We assume that a firm like Atlantic Cement is held liable for the external costs it inflicts on others. The situation facing the firm is shown in Figure 1. The company’s marginal private-cost curve, *MPC*, indicates the private cost to the firm of producing different quantities of cement. Private costs include the capital, labor, land, and materials but not the external harm caused by pollution. The external costs of pollution are added to the private costs to yield the social costs of producing cement. Figure 1 depicts two marginal social-cost curves representing two different technologies. Under the old technology, the addition of external costs of pollution to the private costs of production yields the marginal social-cost curve *MSC*. This curve depicts the true cost to society of each level of production under the old technology. There is, however, a new technology that pollutes less. Its marginal social costs are shown along line *MSC'*. The superiority of the new technology lies in the fact that it causes half as much pollution at any given level of output as the old technology. For example, the old technology might use filters in the smoke stack, and the new technology might use scrubbers in the smoke stack.

**Figure 1**

The incentives to adopt a new, superior technology under a rule of temporary damages.



Under either technology and in the absence of any court or regulatory action, the company's profit-maximizing rate of output,  $q_0$ , is determined at the intersection of the private marginal-cost curve and the prevailing output price,  $P_0$ . Under the old technology, the total amount of external cost inflicted by the output rate  $q_0$  is the area  $ABC$ . Under the new technology, the total amount of external cost inflicted by the output rate  $q_0$  is the area  $ABD$ . The net social cost inflicted by the last unit of output is  $t' + t$  under the old technology and  $t'$  under the new technology. Note that it is easy to see here that, even if there is no legal compulsion for the firm to take external costs into account, society is better off if the firm is producing under the new technology rather than under the old technology. However, if the firm is not required to internalize these external costs, it has no incentive to adopt the new technology.

However, matters change if the firm can be made to internalize the social cost of its production of cement. Under the old technology and with the firm held responsible for its external costs, the profit-maximizing rate of output is determined by the intersection of  $P_0$  and  $MSC$  at  $q_1$ . At this point the cost of pollution is area  $AEF$ . But under the new technology and with the firm held responsible for its external costs, the profit-maximizing rate of output is determined by the intersection of  $P_0$  and  $MSC'$  at  $q_2$ . Social efficiency requires the firm to adopt the new technology and produce at  $q_2$ . (Can you identify the cost of pollution at production level  $q_1$  under the old technology, and at  $q_2$  under the new technology?<sup>61</sup>)

<sup>61</sup> At  $q_1$  under the old technology, the cost of pollution is  $AEF$ . At  $q_2$  under the new technology, the cost of pollution is  $AGH$ .

But what about the firm? Is it indifferent between the two technologies? No. Assuming that the firm pays pollution costs, its maximum profits under the old technology are the area  $AP_0F$ , whereas maximum profits under the new technology are  $AP_0H$ . It is obvious that  $AP_0H > AP_0F$ .

How do these considerations relate to the question we asked above about the incentives for adopting superior technologies of production under the alternative damage measures? The intuitively plausible answer is that the cement company will adopt the cleaner technology more quickly under temporary damages than under permanent damages, and that intuition is borne out by our formal analysis. However, these economic advantages to temporary damages over permanent damages must be balanced against the potentially higher administrative costs of temporary awards.

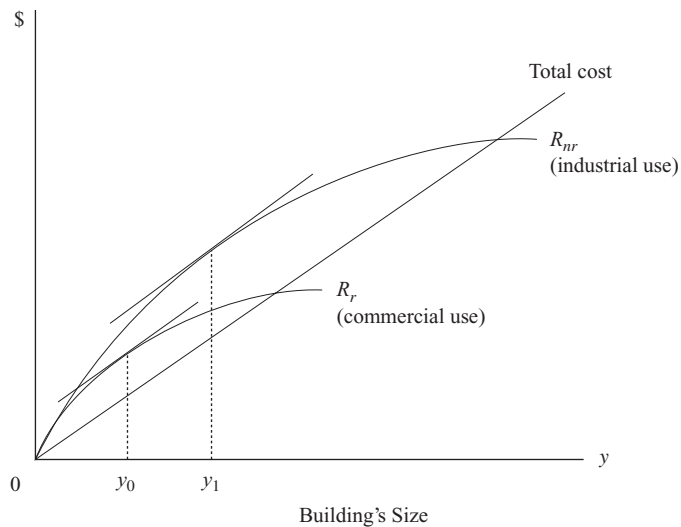
**QUESTION 37:** The price line  $P_0$  is horizontal in Figure 2. What does this fact indicate about competition?

**QUESTION 38:** Assume that science reveals a new health hazard caused by breathing pollution from cement factories. How would such a discovery modify the graph and change the efficient level of production of cement?

## D. Takings

Clear and certain property rights may facilitate bargaining, which creates a surplus from cooperation and exchange. Conversely, unclear and uncertain property rights may impede bargaining, which destroys the social surplus. The power of the state to take property (that is, to compel its sale to the state) and regulate its use reduces the clarity and certainty of

**Figure 2**  
The incentive effects on private investors of a difference between compensable takings and noncompensable regulations.



property rights. The resulting destruction in social surplus represents the economic cost of the state's power to take property and regulate its use. Offsetting the economic cost is the benefit of providing public goods at lower cost. In this section we develop these ideas into an economic theory of the taking and regulatory powers.

In many countries, the constitution circumscribes the state's power to take private property. For example, the takings clause of the Fifth Amendment to the U.S. Constitution reads, "nor shall private property be taken for public use, without just compensation." Thus, the Fifth Amendment prohibits the state from taking private property except under two conditions: (1) the private property is taken for a public use, and (2) the owner is compensated. We will explain the economic rationale for these two conditions.

**1. Compensation** To understand the compensation requirement, we proceed in two stages. First, assume that there were no requirement to compensate (as was the case in England centuries ago) so that expropriating private property might be a means of financing the government. Second, assume that there is a requirement to compensate and examine its incentive effects for the government to use private property. (We will examine compensation's effect on the private property owner's use of the property in a subsequent section.)

First, contrast takings and taxes as means of financing government. Taxes are assessed on a broad base, such as income, property, sales, or bequests. Everyone subject to the tax faces the same schedule of rates. In contrast, a taking involves a particular piece of property owned by a particular person. Tyrannies sometimes finance government and enrich officials by taking property from individuals. To finance the state by takings, the private owner whose property is appropriated must not receive compensation. If the private property owner received compensation equal to the market value for his or her property, the state could not profit from taking it. So the requirement of compensation can be viewed as a device to channel government finance into taxes and away from takings.

Economics provides strong reasons for financing the state by taxes rather than takings. Any kind of expropriation distorts people's incentives and causes economic inefficiency, but taxes distort far less than uncompensated takings. To see why, consider the basic principle in public finance that focused taxes distort more than broad taxes. Applying this principle, a given amount of revenues can be raised with less distortion by a tax on food rather than vegetables, or a tax on vegetables rather than carrots. This principle follows from the fact that avoiding broad taxes is harder than avoiding narrow taxes. For example, avoiding a tax on food requires eating less, whereas avoiding a tax on carrots requires eating another vegetable, such as cucumbers. Broad taxes distort behavior less because many people cannot change their behavior to avoid broad taxes. Thus, efficiency requires the state to collect revenues from broad taxes such as income or consumption.<sup>62</sup> In contrast, takings have a very narrow base. Individual owners will go to

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<sup>62</sup>The precise proposition is that goods should be taxed at a rate inversely proportional to their elasticity of demand and supply. Broad taxes fall on aggregates that are inelastically demanded and supplied.