

1. In a tort suit, defendant has been found liable, but the issue of damages has yet to be litigated. At this stage, prior to hearing the evidence about the plaintiff's harm, the defendant doesn't know if he is facing a high-harm or a low-harm plaintiff. He knows, though, that if the case were to be litigated through, the outcome can be either high damages or low-damages. Specifically, the defendant knows that if the plaintiff will be proven to have suffered high harm, the plaintiff would be granted a judgment of \$30,000, and if the plaintiff will be proven to have suffered low harm, the plaintiff would be granted only \$10,000. The defendant believes that the likelihood of each outcome is 50%. Assume also that the plaintiff knows exactly how much her harm is, and thus can predict perfectly the outcome of the damages phase of litigation.

Litigating the case all the way through trial is costly for both parties (in terms of legal fees and time): a trial costs \$5000 for each party. These mutual cost figures are known to both parties. A settlement doesn't cost the parties anything. Assume that when bargaining over a settlement, the defendant makes one take-it-or-leave-it offer, which the plaintiff will accept if it improves his payoff relative to trial.

- (a) What offer will the defendant make?
 - (b) Would a plaintiff with low harm (of \$10,000) accept this offer? What about a plaintiff with high harm (of \$30,000)?
 - (c) Suppose the defendant can spend a cost of \$4000 prior to the settlement offer and acquire information about the exact harm that the plaintiff suffered (that is, figure out whether the plaintiff's harm is going to be assessed by a court at \$10,000 or \$30,000). If the defendant acquires the information, he expects to be able to make his take-it-or-leave-it settlement offer dependent on this information. Would the defendant acquire the information?
2. P has sued D for harm alleged to have been done by D to P. The parties agree that if P wins, P will be entitled to damages of \$50,000; if P loses, he will receive nothing. In addition, it will cost *each* party \$4,000 to conduct a trial.
 - a) Suppose that P and D both believe that the probability that P will win at trial is 60%. What is the range (in dollar value terms) of any possible settlement agreement?
 - b) Instead, suppose that P believes he will win with 80% probability, but D believes that P will win with only 20% probability. Is settlement still likely? Explain.
 - c) Now assume that both P and D know that P has absolutely no chance of winning at trial. Also, assume that P's trial cost is only \$2,000 while D's trial cost is \$8,000. Will D be willing to settle the case despite certain victory at trial? What factors might influence your answer to the previous question?
 3. Class action lawsuits permit an individual to bring suit on behalf of an entire class of plaintiffs, if (among other things) the class is large and the claims of class members have many issues in common. Explain the economic rationale behind permitting class action lawsuits. Also, summarize problems that arise from the class action procedure.
 4. Suppose the criminal's gain counts as a benefit that offsets the victim's loss. Then my gain from stealing \$100 from you exactly offsets your loss of \$100, so there is no social benefit or social loss ($\$100 - \$100 = \$0$). In this framework, what is the objection to crime? How can crime impose more costs than benefits?

5. Describe how each of the following would affect the economically rational amount of crime and explain your reasoning.
 - a) An increase in the payoff per unit of crime.
 - b) An increase in the amount of effort devoted to apprehension and conviction.
 - c) A decrease in the severity of punishment for a crime.
6. For each of the situations listed below, indicate how the optimal allocation of resources between severity of punishment and certainty of punishment would be affected. In addition, indicate whether, and if so, how, the maximum amount of deterrence that could be achieved with available resources would be affected.
 - a) An increase in the amount of resources devoted to crime deterrence where all of the new resources are for punishment activities.
 - b) A decrease in the amount of resources devoted to both certainty and severity of punishment.
 - c) A increase in the per unit cost of severity of punishment, holding the per unit cost of certainty of punishment and the total amount of resources devoted to the two activities constant.
7. Use the economic approach to the analysis of crime to explain why considerably more resources are allocated to protecting some individuals, such as the President of the United States, from violent crime than are allocated to protecting the average person on the street.
8. In many instances, a person who has been convicted of theft can be sentenced to multiple years in prison. In many of these cases, the wages forgone by the incarcerated individual (not to mention court costs and the costs of imprisonment) far outweigh the value of the property that was stolen. Explain why the effort devoted to apprehension, conviction, and incarceration in such cases might nonetheless be economically efficient.
9. Assume that the expected punishment for a crime is such that it is economically efficient for the rational amoral criminal to engage in some positive amount of crime. Is such a situation necessarily economically inefficient from society's point of view? Why or why not?
10. Generally, states have passed criminal statutes prohibiting both prostitution and solicitation of prostitution.
 - a) These statutes interfere with the right of consenting adults to form a contract. What problem or problems might justify governmental restrictions on the right to free contract in this market (i.e., describe an assumption of perfect competition that might not be valid in this market)?
 - b) Are criminal sanctions such as forcing a criminal to pay a fine or to suffer some other sanction such as imprisonment an efficient means to address the problems described in your answer to (a) above? In your answer, select another means to address the problem (e.g., targeted educational program about the risks of prostitution, legalization of prostitution, a program to help women find alternative employment, a combination of these). Is the means you selected more or less efficient than criminal statutes prohibiting prostitution and solicitation of prostitution? Explain.
11. Rutgers library maintains a policy in which a book that is charged out to one borrower may be recalled by another patron if no other copies are available within the Rutgers libraries. The borrower who has the book will be notified and will have 14 days to return it once notice is mailed. Borrowers who fail to return books by a recall due date are "fined" \$5 per day, to a maximum of \$50, and their borrowing privileges are suspended immediately. Further, the

university reserves the right to "hold" transcripts and diplomas as a result of nonpayment of these obligations.

- a) What expenses is the original borrower likely to incur when returning a book even when the patron who is recalling the book does not need the book until two weeks after the recall due date?
 - b) If the original borrower forgets to return a book until after the fine has reached \$50, does the original borrower have an incentive to return the book prior to the time he or she needs a transcript or another book from the Rutgers library? Explain.
 - c) Do you consider the fine sanction to be more or less efficient than the holding of transcripts (assuming each provides the same incentive to return the books)? Explain.
12. A number of changes have occurred in the areas of law enforcement over the past few years. These changes include the installation of video equipment in squad cars (to better document activities at the scene of crime and the behavior of suspects at the time they are apprehended by police), and increased reliance on neighborhood watch programs (in which people in a neighborhood actively report suspicious activity to the police). In addition, many observers have suggested that current law should be amended by not only punishing convicted criminals but also by requiring them to pay restitution to their victims.
- a) Use the model that illustrates the optimal allocation of resources between severity and certainty of punishment to analyze the effects of the use of video equipment in squad cars on the optimal allocation of resources among deterrence activities and the achievable level of deterrence. Assume that additional funds are allocated to law enforcement to finance the new equipment.
 - b) Use the model that illustrates the optimal reduction in crime to analyze the effect of the increased reliance on neighborhood watch programs.
 - c) Use the model that illustrates the rational amount of crime *and* the model that illustrates the optimal reduction in crime to analyze the effects of the requirement that criminals pay restitution to their victims on the economically rational amount of crime and the economically efficient reduction in crime.
13. A number of analysts advocate policies that would effectively legalize the use of certain addictive drugs, such as marijuana and cocaine, citing the relatively high costs of anti-drug policies and the apparent failure of these policies to have an appreciable effect on drug use in the United States. Other analysts are adamantly opposed to such policies and instead argue that the authorities should implement even tougher policies against drug distribution, citing the destructive effects of drug abuse on productivity and social well-being.
- a) Using the supply-demand model, the concept of negative externalities, and assumptions about the elasticity of supply and elasticity of demand, construct separate analyses that would support *each* side's position. (Note there will be two analyses and you should make assumptions about elasticity that do the most to reinforce each side's argument.)
 - b) Which argument do you consider to be more credible? Why?
 - c) Based on your answers to parts (a) and (b), what do you consider to be the appropriate policy regarding what are currently illegal addictive drugs. In formulating your answer be sure to consider the efficiency implications of your policy recommendation. (Be careful here. This is not as cut and dried as it may look. Among other things, the issue of externalities tends to complicate things.)