# Homework 5

Econ 201H

Homework 5 reviews the various Chapter 10 extensions of our models to account for crime, politics, norms, and externalities. The results that you "turn in" will simply be a *list of your multiple-choice answers* ((1) d, (2) c, etc.) *in ink or typed,* but you should think carefully about each question using the information and models covered in class and the class notes to determine which of the graphs, if any, are relevant for determining the correct answers. This last homework problem set is due Tuesday in the final week of class (which is a class meeting earlier than usual), so that I can grade and return your homework 5 before final.

Figure 5.1 Maximizing Expected Profit
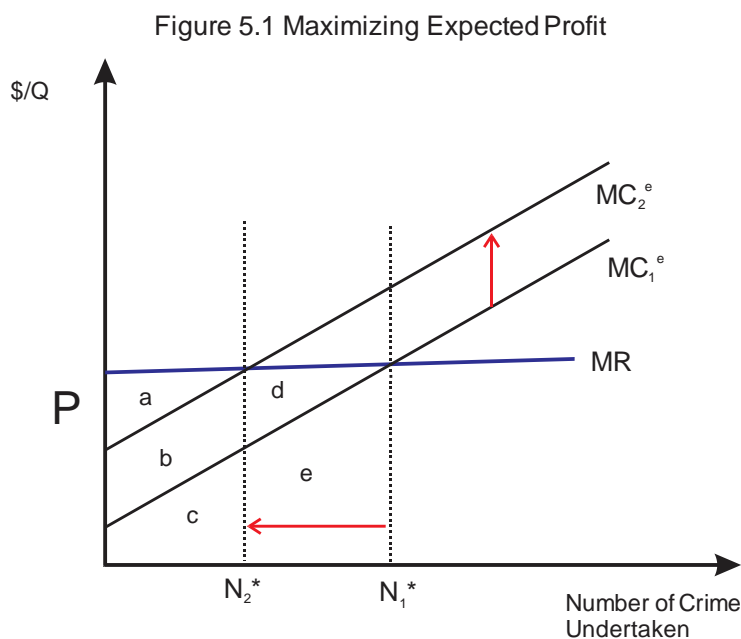
(1) Figure 5.1 illustrates a profit maximizing thief. MC_1 is his or her initial expected marginal cost curve. That cost curve includes all but which of the following factors:

   a. The opportunity cost of the criminal activity
   b. The expected cost of being caught, convicted and punished.
   c. The probability of being caught, convicted, and punished.
   d. The resale value of the items stolen.
   e. All of the above are determinants of his or her MC^e curve.

(2) The expected profits in the original case (with MC_1) are characterized by the area(s):
   a. c
   b. c + e
   c. a + b + d
   d. a + b - c
   e. None of the above

(3) According to the Becker model of rational criminals and the models of rational consumers and firm owners developed in class, property crimes tend to affect market equilibria because it:
   a. Increases the risk of downside losses by firms.
   b. Increases the risk of downside losses by consumers.
   c. Increases the demand for locks and cameras.
   d. Both a and b are factors that influence market equilibria.
   e. All of these factors alter market equilibria.

(4) The median voter tends to get his or her way under majority rule because:
   a. He or she is the wisest of the voters.
   b. He or she is the most moderate of voters.
   c. He or she is in the middle (at the median) of the voter ideal points.
   d. He or she forms a stable coalition with other voters.
   e. None of the above

(5) In a contest between two candidates for high office, the candidate that receives the most votes is the one that:
   a. Is closest to the median voter's ideal point.
   b. Is closest to the indifferent voter's ideal point.
   c. Is the one that promises the largest government budget.
   d. Is the one that promises the smallest government budget.
   e. None of the Above

(6) Suppose that the median voter's ideal point for highway construction is determined by his or her net benefits from the use

of highways which are partly determined by his or her marginal tax cost for highway construction and maintenance. Highways are a "normal" good for voter-consumers. Which of the following will tend to reduce the rate of highway construction?

a. An increase in consumer income
b. An increase in the cost of highway construction
c. A decrease in tolls and gasoline taxes
d. A decrease in the price of gasoline
e. None of the above will decrease the rate of highway construction in a median voter model of policy formation.

(7) Suppose that figure 5.1 characterizes the decision of two individuals. One that has internalized an anti-theft norm and one that has not. What is the crime rate of the person that has internalized the anti-stealing norm? How can you tell which is which?

a. $N_1{}^*$
b. $N_2{}^*$
c. You can tell because the person with the anti-theft norm has a higher expected marginal cost curve than the one that has not.
d. You can tell because the person with the anti-theft norm has a lower MC than the one that does not.
e. Answers a and c are correct.
f. Answers b and c are correct.
g. Answers a and d are correct.
h. Answers b and d are correct.
i. None of the above are correct.

(8) The claim that some ethical ideas tend to increase the extent of markets and others tend to reduce it implies:

a. That the extent of markets varies with the ethical systems internalized in the society of interest.
b. The size of markets is, ultimately, determined by how ethical people are.
c. That the size of markets is unaffected by capital accumulation or rates of innovation.

d. That the size of markets is unaffected by the tax and regulatory systems adopted by its political system.
e. All of the above are implied.

Figure 5.2 A Negative Externality
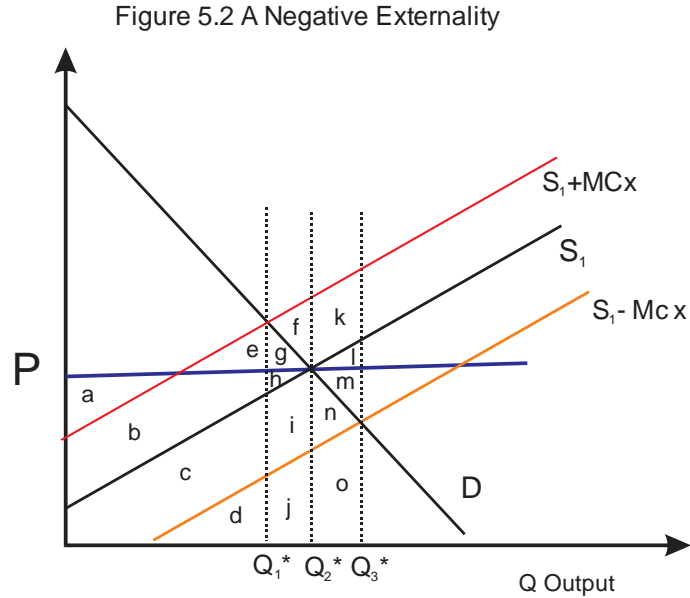
(9) Figure 5.2 illustrates a market setting with negative externalities of the amount MCx, as with the spillover costs from some forms of air pollution. (The MCx curve is not depicted but is assumed to be greater than zero over its entire range.) The social marginal cost curve, given this externality, can be found by:
a. Focusing entirely on the MCx curve.
b. Adding the MCx curve to the demand curve.
c. Adding the MCx curve to the supply curve
d. Subtracting the MCx curve from the supply curve
e. Subtracting the MCx curve from the demand curve.

(10) The social net benefit maximizing output is thus:
a. Q_1*
b. Q_2*
c. Q_3*
d. P
e. None of the above