## Homework #6/final exam prep

Not collected

**Directions:** The following questions/topics are designed to help you study for the final exam, which will cover the lectures on economics of crime, from 4/2 through 4/27. Topics listed below are not exhaustive, in the sense that any topic discussed in class or appearing as a main point of any of the assigned readings may appear on the final. Since it is possible that some of these questions, or close variants, will appear on the final exam itself, I will not be providing an answer key for this problem set.

**Problem 1:** Describe the overall trends in crime rates in the US over the last 50 years. Discuss some of the possible causes of any major increases or decreases in the crime rate, and discuss for which of your causes there is strong evidence for or against.

**Problem 2:** Describe the method of contingent valuation for measuring the economic impact of crime. What are the advantages and disadvantages of this method relative to trying to measure the cost of crime directly?

**Problem 3:** Describe some of the difficulties inherent in trying to measure the overall economic impact of crime (for example, describe specific data problems confronted by the researcher, or methodological problems with how to measure the impact of certain crimes).

**Problem 4:** Discuss ballpark estimates for the overall economic impact of crime. Break down your estimate(s) into broad categories: for example, roughly what fraction of the overall cost of crime is due to murders, what fraction to illegal drug use, what fraction to violent crime as a whole?

**Problem 5:** How much is \$1 in 1980 dollars worth in 2011 dollar? How about \$1 in 1990? \$1 in 2000? You should have rough estimates of how to correct for inflation memorized or written on your note sheet for the final exam.

**Problem 6:** Discuss the tradeoffs a policymaker faces in choosing between larger fines, longer prison sentences, and greater monitoring in deterring crime. Give at least two reasons discussed in class why deterring crime through longer prison sentences may not work well.

Problem 7: Discuss how an economist would answer the question "what is the optimal level of crime?"

**Problem 8:** Given how resources are currently allocated, the Lexington police department can use a marginal policeman to prevent murders, in which case he will prevent 1 murder/year, or the prevent robberies, in which case he will prevent 75 robberies/year. The marginal benefit to preventing a murder is \$10M, while the marginal benefit to preventing a robbery is \$100,000. Are resources being allocated efficiently?

**Problem 9:** What problem would arise with estimating a regression line of crime rate on police spending per capita, in order to determine the elasticity of crime with respect to the size of the police force?

**Problem 10:** If demand for cocaine is inelastic, is a policy designed to decrease demand in cocaine likely to be effective at achieving its goal of decreasing cocaine use and crime associated with it? Why or why not?