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 two main data sets used to calculate crime statistics and trends. Briefly discuss the relative advantages and disadvantages of each. Note that only one of these data sets was discussed in lecture.

Problem 2: 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 3: 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 4: 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 5: 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 6: 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 7: 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 8: Discuss how an economist would answer the question "what is the optimal level of crime?"

Problem 9: 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 10: Does available evidence suggest that the death penalty has a large deterrence effect? Is it likely that the benefit of the death penalty outweighs the cost, based only on deterring crime?

Problem 11: Discuss the effect of prison conditions on crime. What data do Katz, Levitt, and Shustorovich exploit to estimate this effect?

Problem 12: Be able to explain the basics of regression analysis (it might help to review a stats book or website). What problem would arise with estimating a regression line of crime rate on police spending?

Problem 13: Be able to discuss broad trends in drug crimes over the past 150 years. What are some possible causes for any big increases or decreases in illegal drug use, particularly heroin and cocaine?

Problem 14: What are the main costs of illegal drug use? Be able to discuss a rough estimate of the cost of drug crime, and be able to roughly break down this estimate into its main components (for example, what fraction of your total estimate is due to increased health care costs?).

Problem 15: In broad terms, describe the markets for heroin and cocaine. What is the approximate markup on each, and who profits from each drug? Discuss the relationship between market power and markup.

Problem 16: 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?

Problem 17: Read the section of the Levitt and Venkatesh paper on gang wars. What features of organized crime allow for stable alliances between different organized crime groups, but apparently don't allow for such alliances between different street gangs? (your answer here may be somewhat speculative).

Problem 18: Discuss the wages earned by street gang membership and leadership, according to the case study discussed in the Levitt and Venkatesh paper. Are the wages earned by street-level dealers consistent with the main hypothesis of the economic study of crime, that criminals respond rationally to incentives? (A good answer will make arguments both for and against this.)

Problem 19: Over the four-year period for which Levitt and Venkatesh have data, city-wide crack prices declined by 40%, while the crack price charged by the street gang under study decreased by only 27%. Discuss why this might be.

Problem 20: The hourly wage earned by gang members increased dramatically in year four of the Levitt and Venkatesh data. Discuss possible reasons for this increase, with at least one reason relating to efficiency wage theory.

Problem 21: Discuss the effect of inter-gang warfare on the local market for crack, using supply and demand analysis, and the empirical results of Levitt and Venkatesh.