Prof. Bryan Caplan bcaplan@gmu.edu http://www.bcaplan.com Econ 321

## HW#3 (Answer ANY 6 of the following. Please type all answers)

- I. Use Aggregate Labor Market diagrams to show the effect of immigration when (a) all workers have identical skills and (b) native and foreign workers have different skills.
- II. Suppose that inside the United States, Americans and Mexicans workers can produce the following in a day.

	American Worker	Mexican Worker
Corn	4	2
Cars	4	1

Suppose that with immigration, one car sells for 1.5 bales of corn. Create a new table that shows how immigration effectively raises both Americans' and Mexicans' productivity.

- III. How would increased immigration from Mexico be likely to affect (a) U.S. workers in English-intensive jobs, (b) U.S. workers in non-English-intensive jobs, (c) U.S. capitalists and landowners, (d) Mexican immigrants, and (e) Mexicans who stay in Mexico? Why?
- IV. What is the single best argument against open borders? What are the main weaknesses with this argument? Describe a cheaper, more humane way to address this problem without restricting immigration. (1 paragraph)
- V. Suppose interest rates rise. What does human capital theory predict about college attendance? Wages for Ph.D.s? Use two diagrams one for the S&D of education, the other for the S&D for workers with Ph.D.s?
- VI. Suppose a magic drug makes people immortal. What happens to the average level of education? Why? (2-3 sentences)
- VII. What happens to the price of slaves when...? Graph your answer.
  - A. Interest rates fall.
  - B. The cost of food falls.
  - C. Someone develops a new alarm that quickly alerts owners about escape attempts.
  - D. The government passes a law requiring owners to provide extra care for elderly slaves.
- VIII. Using two diagrams per question, show what happens to slaves and free laborers when:
  - A. Worker productivity rises (and product demand is relatively elastic).
  - B. The government imposes a minimum wage.
- IX. Calculate your PDV of going to college, using your best guesses for your income if you do and don't go to college. (To save time, just do your calculations for 15 years after high school graduation). Assume the interest rate is 5%. Does college attendance have a positive PDV?
- X. Using your answer to VI, guess what the interest rate would have to be to reverse your answer. (You're guess doesn't need to be right, but it must

go in the right direction). Then calculate the PDV using the new interest rate. Was your guess too high? Too low?

- XI. Carefully explain ONE reason why a 12.6% rate of return on education is an overestimate. (1 paragraph)
- XII. Why does controlling for IQ reduce the estimated rate of return to education? (1 paragraph)
- XIII. How would you expect controlling for Conscientiousness to change the estimate rate of return to education? (2-3 sentences)