

EXAM #2

Economics 412, Fall 2020

Instructions

The pages of this exam are numbered 1 through 9. The exam will last for one hour and 15 minutes. Each question is worth one point, there are a total of 47 questions.

Tips for Getting a Good Exam Score

- **MANAGE YOUR TIME WISELY** – if you are banging your head against a wall on a question, move on! Do the easy questions first. “Go for the low-hanging fruit!”
- Select your answers on the google form (link will be shared by proctor at the time of the test)

Honor Regulations and Honor Pledge

- You must not discuss the exam with anyone who has not yet taken it.
- You must not share this exam with future students.
- You may use a simple calculator, but they shouldn't be necessary.
- You must work alone on the exam.

True/False:

- a) True
- b) False

- (1) “An Aggie does not lie, cheat, or steal or tolerate those who do.” I will follow the Aggie code of Honor. Mark this question “True” to commit to taking this exam honestly (it is also worth a point on the exam!).
 - a. True
 - b. False
- (2) If individuals are myopic (i.e., focused excessively on the present) they may at least appear to underinvest in education
 - a. True
 - b. False
- (3) In regressions of earnings on education, ability is an often omitted variable
 - a. True
 - b. False
- (4) The two models of investments in education discussed in class are the human capital and human labor models
 - a. True
 - b. False
- (5) Civic participation is a potential social return to education
 - a. True
 - b. False
- (6) Human capital is an individual’s stock of skills, which may be increased by education
 - a. True
 - b. False
- (7) Under the signaling model, investments in education are wasteful
 - a. True
 - b. False
- (8) One effect of experience rated taxes is to decrease the incentives for firms to lay off workers.
 - a. True
 - b. False
- (9) One argument for a public UI (unemployment insurance) program is that the private market would not be successful at providing sufficient levels of unemployment insurance to a sufficient number of people due to adverse selection.
 - a. True
 - b. False

- (10) The actuarially fair price of insurance occurs when firms get 0 profit.
a. True
b. False
- (11) A risk-averse consumer will fully insure under actuarially fair prices.
a. True
b. False
- (12) An individual is risk averse over a certain gamble if and only if the expected utility of a gamble is less than the utility of the expected value.
a. True
b. False
- (13) The hidden information problem can be solved by forcing everyone to buy insurance
a. True
b. False
- (14) Unemployment insurance is Federally mandated, states don't have any effect on it.
a. True
b. False
- (15) UI benefits are capped at a certain level, resulting in some high earners receiving the same amount of UI benefits as lower earners. This makes the *benefit schedule* progressive
a. True
b. False
- (16) One of the arguments of the "for UI" debate team was that stimulus checks are not well-targeted to those in need, resulting in some individuals that just put the money in the bank.
a. True
b. False
- (17) One of the arguments of the "for free college" debate team was that making college free would increase access to higher education and reduce economic disparities
a. True
b. False

Multiple Choice

- (18) Which of the following is not an economic motivation for government involvement in education?
- a. Externalities
 - b. Family failures (divergence between child and parent preferences)
 - c. Borrowing constraints
 - d. Individual failures (individuals make poor choices due to lack of self-control)
 - e. Individuals will make more money if they go to college
- (19) Which of the following is/are a potential externality of education?
- a. Individuals will make more money if they go to college
 - b. Individuals will have better jobs if they go to college
 - c. Individuals will know more if they go to college
 - d. Individuals will be less likely to commit crime
 - e. All of the above
- (20) Based on our discussion in class, which of the following may be reasons that high achieving low-income students are less likely to enroll in selective institutions than high achieving high-income students:
- a. They aren't as qualified to attend
 - b. They are charged at the same rates as high-income students and cannot afford to attend
 - c. They are unaware that these institutions charge substantially lower rates to low-income students
 - d. They don't perform as well on standardized tests
 - e. All of the above
- (21) Which of the following are potential drawbacks to the use of school vouchers
- a. May result in segregation
 - b. Are largely a transfer to rich families
 - c. Consumer sovereignty
 - d. All of the above
 - e. a and b
- (22) Which of the following are predictions of the human capital model?
- a. Those with more education are more productive
 - b. Those with higher education will earn more
 - c. Education will be obtained early in life
 - d. All of the above
- (23) Which of the following are predictions of the signaling model?
- a. Those with more education are more productive
 - b. Those with higher education will earn more
 - c. Education will be obtained early in life
 - d. All of the above

- (24) Which is a reasonable test to distinguish human capital vs. signaling
- a. Measure whether educated people are more productive
 - b. Measure productivity before and after education
 - c. Test whether higher ability people get more schooling
 - d. Find identical people and randomly assign one to go to college. Compare earnings outcomes.
 - e. None of the above
- (25) Which of the following are arguments that support the signaling model
- a. Measured knowledge of things taught in school is low
 - b. Those with more education earn more
 - c. Societies with higher education levels are more productive
 - d. More educated people are healthier
 - e. None of the above
- (26) Which of the following are examples of hidden information?
- a. Sellers know the quality of cars
 - b. Patients know their risk of illness
 - c. Some people drive less carefully after buying car insurance
 - d. A worker spends all day at work on YouTube
 - e. All of the above
 - f. a and b
 - g. c and d
- (27) Which of the following exhibit adverse selection?
- a. High risk patients are more likely to buy insurance
 - b. High quality cars drive out low quality cars in the Lemons Market
 - c. I don't lock my house after buying poverty insurance
 - d. Some people drive riskily after buying car insurance
 - e. All of the above
- (28) Which of the following could help alleviate the adverse selection problem in the Lemons (used car) market?
- a. Providing car safety ratings
 - b. Inspecting the production process of cars regularly
 - c. Providing exchange and refund services for high quality cars (i.e., warranties)
 - d. All of the above
 - e. None of the above
- (29) Which of the following are reasons for social insurance?
- a. Solve hidden information problem
 - b. Reduces free-riding from public altruism
 - c. Improve efficiencies in redistributing wealth
 - d. Lower administrative costs
 - e. All of the above

- (30) Which may be benefits of Unemployment Insurance for individuals?
- a. Reduce stress
 - b. Smooth consumption over unemployment spells
 - c. Encourage them to find a job quickly
 - d. Help people find a job they like
 - e. All of the above
 - f. a,b and d
- (31) Which of the followings may be negative effects of the UI program?
- a. People who are eligible for UI may move slowly to find new job
 - b. The larger the benefit it is, the less likely for people to find a job
 - c. Moral Hazard
 - d. All of the above
 - e. a and b
 - f. a and c
- (32) Which of the following *were not* arguments made by the “against free college” debate team:
- a. Free college would result in the production of too many degrees, reducing the value of those degrees in the labor market
 - b. Free college doesn’t target resources to degrees with high returns on investment
 - c. As a result of the low tuition and fees charged and high amounts of financial aid, community college is already essentially free for those with low incomes in most places
 - d. Free college provides a transfer to groups of individuals that would have gone to college anyways
 - e. Free college would just result in employers requiring a masters degree to get a job rather than a BA

Multipart Questions:

Solis (2013) investigates the effect of credit (loan) access on college enrollment in Chile. Recall that students with a PSU score above 475 were eligible for loans.

- (33) Credit constraints or issues with credit access are an example of a:
- Subsidy
 - Tax
 - Market Failure
 - Positive Externality
 - Negative Externality
- (34) In Figure A below, the PSU score is:
- The discontinuity
 - A measure of college enrollment
 - Discontinuous
 - The running or assignment variable
 - The outcome

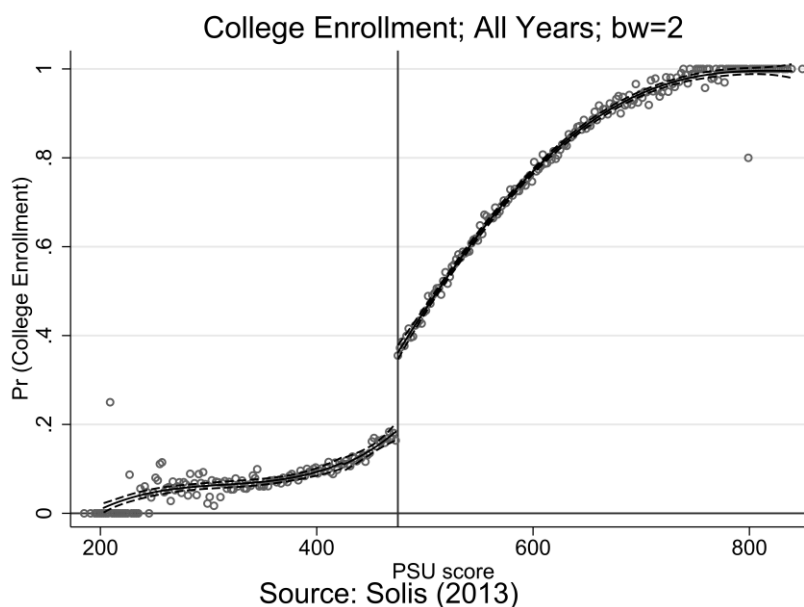


Figure A

- (35) Figure A suggests that credit constraints in Chile are:
- Not present
 - Present for all students
 - Present for some students in the neighborhood of PSU scores around 475
 - Present for all students in the neighborhood of PSU scores around 475
 - None of the above

- (36) Solis (2013) is using a difference-in-differences design to identify the effects of loan availability.
- True
 - False (this is a regression discontinuity design)

The state of Tennessee was interested in understanding the effect of class size on student outcomes. They decided to compare the test scores of students in small classes with those in large classes. They found that students in small classes performed worse and concluded that small classes were bad for learning.

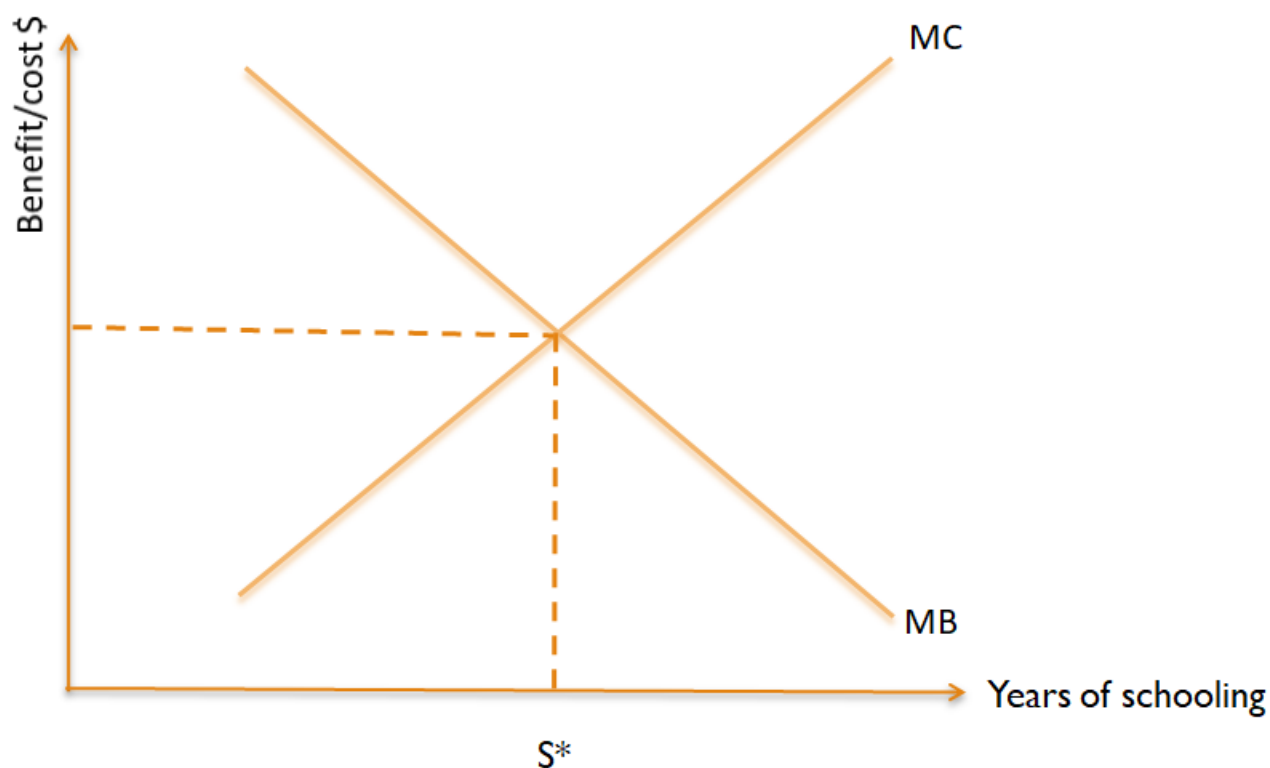
- (37) What else could explain why students in small classes were performing worse?
- Some classes were smaller because students switched out of classes with bad teachers
 - Students with learning difficulties were assigned to smaller classes
 - The teachers of small classes were more likely to teach to the test than teachers of large classes
 - All of the above
 - a and b
- (38) To overcome omitted variable bias, Tennessee could:
- Randomize students to different class sizes and evaluate the outcomes
 - Include controls for all omitted variables
 - Look for a natural experiment that resulted in different class sizes for different students
 - All of the above
 - None of the above
- (39) Including controls for all omitted variables is usually a convincing approach
- True
 - False

Tennessee implemented Project STAR, randomly assigning 11,000 students (grades K-3 to small classes (13-17 students) or regular classes (22-25 students). They also randomly assigned kids and teachers to classes.

- (40) Which of the following are limitations of such a randomized experiment
- Expensive
 - Ethical concerns
 - Overcomes omitted variable bias
 - All of the above
 - a and b
 - a and c

- (41) To identify the effect of class size on test scores, researchers should compare test scores for students assigned to small classes with those assigned to regular classes
- True
 - False
- (42) It turns out that some students were able to convince their principals to let them into the small classes. This is problematic because
- It undoes the random assignment
 - It reintroduces omitted variable bias
 - We can no longer be confident that the students assigned to small and large classes are similar on average
 - None of the above
 - All of the above

The following questions involve a graphical presentation of investments in education. For all of the remaining questions, assume that education has positive externalities.



- (43) If education has positive externalities, the marginal social benefit curve would be
- The same as the MB curve
 - Above and left of the MC curve
 - Below and left of the MB curve
 - Above and right of the MB curve
- (44) If education has positive externalities, S^* is
- Below the socially optimal amount of schooling
 - Above the socially optimal amount of schooling
 - The same as the socially optimal amount of schooling
 - Don't have enough information
- (45) This is an example of a market failure
- True
 - False
- (46) How might the government move individual investments to the social optimum
- They should do nothing
 - They could subsidize education
 - They could tax education
 - They could require enrollment through a certain number of years of schooling
 - b and c
 - b and d
 - None of the above
- (47) To determine the appropriate extent of government intervention, we need estimates of the marginal social benefits of education
- True
 - False