



Chapter 17 Exercises

Self-Check Questions

1. For each of the following purchases, indicate whether you would expect the degree of imperfect information to be relatively high or relatively low:
 - a. Buying apples at a roadside stand
 - b. Buying dinner at the neighborhood restaurant around the corner
 - c. Buying a used laptop computer at a garage sale
 - d. Ordering flowers over the internet for your friend in a different city
2. Why is there asymmetric information in the labor market? What signals can an employer look for that might indicate the traits they are seeking in a new employee?
3. Why is it difficult to measure health outcomes?

Review Questions

4. Why might it be difficult for a buyer and seller to agree on a price when imperfect information exists?
5. What do economists (and used-car dealers) mean by a “lemon”?
6. What are some ways a seller of goods might reassure a possible buyer who is faced with imperfect information?
7. What are ways a seller of labor (that is, someone looking for a job) might reassure a possible employer who is faced with imperfect information?
8. What are some ways that someone looking for a loan might reassure a bank that is faced with imperfect information about whether the loan will be repaid?
9. What is an insurance premium?
10. In an insurance system, would you expect each person to receive in benefits pretty much what they pay in premiums? Or is it just that the average benefits paid will equal the average premiums paid?
11. What is an actuarially fair insurance policy?
12. What is the problem of moral hazard?
13. How can moral hazard lead to insurance being more costly than was expected?
14. Define deductibles, copayments, and coinsurance.
15. How can deductibles, copayments, and coinsurance reduce moral hazard?
16. What is the key difference between a fee-for-service health care system and a system based on health maintenance organizations?
17. How might adverse selection make it difficult for an insurance market to operate?
18. What are some of the metrics used to measure health outcomes?

Critical Thinking Questions

19. You are on the board of directors of a private high school, which is hiring new tenth-grade science teachers. As you think about hiring someone for a job, what are some mechanisms you might use to overcome the problem of imperfect information?
20. A website offers a place for people to buy and sell emeralds, but information about emeralds can be quite imperfect. The website then enacts a rule that all sellers in the market must pay for two independent examinations of their emeralds, which are available to the customer for inspection.
 - a. How would you expect this improved information to affect demand for emeralds on this website?
 - b. How would you expect this improved information to affect the quantity of high-quality emeralds sold on the website?
21. How do you think the problem of moral hazard might have affected the safety of sports such as football and boxing when safety regulations started requiring that players wear more padding?
22. To what sorts of customers would an insurance company offer a policy with a high copay? What about a high premium with a lower copay?

Problems

23. Using the scenario in Exercise 20, sketch the effects in part (a) and (b) on a single supply and demand diagram. What prediction would you make about how the improved information alters the equilibrium quantity and price?
24. Imagine that fifty-year-old men can be divided into two groups: those who have a family history of cancer and those who do not. For the purposes of this example, say that 20% of a group of 1,000 men have a family history of cancer, and these men have a 1 in 50 chance of dying in the next year, while the other 80% of men have a 1 in 200 chance of dying in the next year. The insurance company is selling a policy that will pay \$100,000 to the estate of anyone who dies in the next year.
 - a. If the insurance company were selling life insurance separately to each group, what would be the actuarially fair premium for each group?
 - b. If an insurance company were offering life insurance to the entire group, but could not find out about family cancer histories, what would be the actuarially fair premium for the group as a whole?
 - c. What will happen to the insurance company if it tries to charge the actuarially fair premium to the group as a whole rather than to each group separately?