

# KEY

ECO 411

Midterm Exam

Fall 2005

Multiple Choice: 4 pts. each, circle correct answer.

1. It may be cheaper to produce an input internally rather than to procure it in the market if
  - a) There are economies of scope associated with producing this input alongside other products, and the firm doesn't use any of the other products.
  - C** b) There are economies of scale in producing this product, and the firm's needs for it are relatively small.
  - C** c) Production of this input requires significant up-front irreversible investments.
  - d) The firm is but one of many users of this type of input, and the firm's needs are sporadic and unpredictable.
  
2. Vertical integration is the preferred strategy when
  - A** **a**) Assets are specific and transactions are frequent.
  - b) Assets are specific and transactions are infrequent.
  - c) Assets are general and transactions are frequent.
  - d) Assets are general and transactions are infrequent.
  
3. Agency costs include all of the following except:
  - a) Resources spent by employers trying to monitor employees' behavior.
  - b) Resources spent by employees trying to convince firms that they are pursuing the firm's goals.
  - C** **c**) Costs associated with hiring outside agents to monitor the principal's goals.
  - d) Costs associated with reductions in output because agents pursue their own goals.
  
4. All of the following are examples of asset specificity except:
  - a) An employee spends time learning to use software that is only used by this firm.
  - B** **b**) An asphalt paving company buys dump trucks so that it can haul its own asphalt from the plant to various paving sites around its plant.
  - c) A manufacturer of automotive glass windshields builds a plant in Georgetown so that it can be next door to the Toyota plant.
  - d) A Long John Silver's franchisee buys a machine that applies breading to fish filets according to the recipe specified by the parent company Yum Brands.
  
5. An upstream manufacturer can exert vertical control over a downstream retailer using a variety of devices. Which of the following is not a commonly used vertical control device?
  - a) Granting exclusive dealerships.
  - D** b) Imposing vertical price restrictions.
  - c) Establishing territorial restrictions on retailers.
  - d**) Using a production process that doesn't require any sunk irreversible investments.
  
6. We call franchising an agent-agent relationship because:
  - a) The franchisor is the principal and the franchisees are the agents.
  - b) The franchisees are the principals and the franchisor is the agent.
  - C** **c**) Principal-agent issues run both directions between franchisor and franchisees.
  - d) There are no principal-agent problems inherent in franchising relationships.
  
7. In the context of this course, hold-up refers to
  - A** **a**) The expropriation of quasi-rents by an opportunistic party.
  - b) The fleecing of unsuspecting investors by unscrupulous investment bankers.
  - c) When one party to an exchange has more information than the other party.
  - d) The function served by a belt when your pants are too big.

Discussion questions and problems: answer in the space provided.

8. (12 pts.) "Bain Capital, a private equity firm, took control of KB Toys in 2000 by putting up just \$18 million. It financed much of the rest of the \$302 million purchase price by loading up the company with debt. It all worked well for Bain Capital, which in April collected a \$121 million dividend—a ten-fold return on its investment in just 16 months, according to a court filing made by an unhappy holder of KB Toys debt. KB Toys, struggling to compete against volume sellers like Wal-Mart Stores Inc., couldn't recover with so much debt on its hands. Its financial troubles worsened, and the company filed for Chapter 11 bankruptcy protection in January 2004." [WSJ, 10/4/05] Were these events foreseeable? Briefly explain why holders of KB Toys' debt should have been more cautious.

Bain Capital has pulled a "fast one" on debt holders. It put up very little of its own money, so that debt holders were left holding the bag when KB Toys went bankrupt. The gigantic dividend payout to equity holders (i.e. Bain Capital) shortly before the firm declared bankruptcy makes this a very suspicious transaction. Investors who bought KB Toys debt should have been more cautious before ~~the~~ lending money to such a highly leveraged corporation.

9. (12 pts.) Consider a firm that employs sales representatives who call on customers out in the field. It is very costly to monitor this type of worker. What is an efficiency wage? Why might paying an efficiency wage to these workers solve the shirking problem?

An efficiency wage is a wage paid to a worker that exceeds the worker's next best alternative wage. If it is very costly to monitor a worker's activities, such a worker may be tempted to shirk. If this worker is paid an efficiency wage, they will think twice before shirking. They will weigh the short-run gain from shirking (and risking being fired) against the present discounted value of the future stream of wage premiums they earn from not shirking.

10. (12 pts.) A good friend from high school owns and operates her own business (currently a proprietorship) in California. She plans to convert it to a corporation and offers you the chance to buy 50 percent of the stock of the company. You would be an inactive partner and she would continue running the company herself. Your shares would thus entitle you to one-half of the profits of this company. Based on the profits the company is currently earning, an independent assessor determines that the company has a market value of \$100,000. How much would you be willing to pay for half of the company's stock under this arrangement? Briefly explain why.

As sole proprietor, your friend currently loses \$1 in profit each time she spends another dollar on nice company car, expensive office equipment, first-class air travel, etc. If she is 50% owner and you are 50% owner, then she will only give up \$.50 in profit for each dollar she spends on business perks. Since she will likely change her behavior after you become half-owner, the profits of the business will likely fall. Hence the market value of the business will be less than \$100,000 under the new arrangement.

11. (16 pts.) A well-known fast-food franchisor requires its franchisees to spend almost a million dollars to construct a restaurant building which sits atop land owned by parent franchisor and leased to the franchisee for 20 years. Write a short essay in which you explain this seemingly peculiar arrangement. Your answer should include explanations of the concepts of irreversible (sunk) investments and quasi-rents.

The franchisor has to worry about franchisees chiseling on quality and depreciating the brand-name capital of the entire chain. If the franchisee has to make an irreversible (sunk) investment from which it expects to earn a stream of quasi-rents, it will be reluctant to cheat on quality and run the risk of termination. By requiring the franchisee to build the restaurant on land owned by the franchisor, the franchisor turns this investment into an irreversible action - i.e. a sunk cost. Franchisees will be more reluctant to cheat on quality and hence will require less monitoring.

12. (10 pts.) What is a search good? What is an experience good? Give an example of each.

A search good is one whose characteristics can be fully determined prior to purchase and consumption. Clothing (e.g. a man's golf shirt) would be an example.

An experience good is one that must be purchased and consumed before the consumer can completely know how much utility they will get.

Restaurant meals would be an example.

13. (10 pts.) You attend the Keeneland yearling sales to buy a colt to train and ultimately race. You see two horses that seem identical to you in every way that you are able to observe. One is offered for sale by a breeder that sells all of the colts that it raises. The other is offered for sale by a breeder that sells some of its colts and keeps others to train and race itself. Would you pay the same price for each colt? Explain why or why not.

The breeder gets to observe the colt daily for a year. It can learn things about the quality and potential of the horse that cannot be determined by a buyer in a pre-auction inspection. A breeder who sells some horses and keeps others to train and race will likely keep the colts with the most potential for themselves. Hence there is a "lemons" problem with the horses offered for sale by this breeder. The breeder who sells all of his horses does not have a lemons problem, so you would be willing to pay a higher price, other things the same.