

EXAM**THE ECONOMICS OF STRATEGY**

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Time limitation: 4 h

Answer (in Swedish or English) all the four questions below !

1. (a) Define briefly the following concepts: (1) Lerner-index, (2) dominant strategy equilibrium, (3) reaction functions, (4) strategic substitutes, (5) strategic complements, (6) credible strategic commitment, (7) tacit collusion, (8) predatory pricing, (9) vertical merger, (10) horizontal merger. (10 p)

(b) Are mergers which increase the degree of concentration within an industry always welfare-reducing? Motivate your answer carefully. In case your answer is negative you should specify plausible conditions under which a concentration-increasing merger could be welfare-enhancing. (5 p)

2. (a) Why is it important for the provider of a service exhibiting network externalities to achieve the critical mass ? (Your answer should include a precise definition of the critical mass. Also your answer is expected to explore the implications in terms of business strategy.) (5 p)

(b) Explain in detail why the market adoption of a new technology may be too fast or too slow even though the adoption decisions are made by perfectly rational decision makers? (10 p)

3. (a) According to the so called Bertrand argument, price competition drives firms' profits down to zero even there are only two competitors in the market. Why don't we empirically observe this in practice very often? (Give at least three explanations) (5 p)

(b) Two firms are engaged in Bertrand competition. There are 10000 people in the population, each of whom is willing to pay at most 10 for at most one unit of the good. Both firms have a marginal cost of 5. Currently, each firm is allocated half of the market. It costs a customer s to switch from one firm to the other. Customers know what prices are being charged. Law or custom is assumed to restrict the firms to charging whole-euro amounts (e.g., they can charge 6 euro, but not 6,50 euro). Suppose initially that $s = 0$. What are the Nash equilibria of this model? Why does discrete (whole-euro) pricing result in more equilibria than continuous pricing? (3 p)

(c) Consider the market characterized in (b). Suppose that $s = 2$. What is (are) the Nash equilibrium (equilibria) of this model? (3 p)

(cont. !)

(d) Consider the market characterized in (b). Suppose now that $s = 4$. What is (are) the Nash equilibrium (equilibria) of this model? (3 p)

(e) Comparing the expected profits in (c) to those in (d), what is the value of raising customers' switching costs from 2 to 4 ? (1 p)

4. Two firms are competing in an oligopolistic industry. Firm 1, the larger of the two firms, is contemplating its capacity strategy, which we might broadly characterize as "aggressive" (A) or "passive" (P). The "aggressive" strategy involves a large increase in capacity aimed at increasing the firm's market share, while the "passive" strategy involves no change in the firm's capacity. Firm 2, the smaller competitor, is also pondering its capacity strategy; it will also choose between strategies A and P. The game matrix below shows the profits (with the profit of firm 1 as the first coordinate) associated with each pair of choices made by the two firms:

		Firm 2	
		A	P
		25,9	33,10
Firm 1	A	30,13	36,12
	P		

(a) If both firms decide their strategies simultaneously, what is the Nash equilibrium? (6 p)

(b) If firm 1 could move first and credibly commit to its capacity expansion strategy, what is its optimal strategy? What will be the optimal response of firm 2 ? Is the resulting equilibrium subgame perfect? (9 p)

Good luck !