



Stockholm
University

Department of Economics

Course name: Antitrust and Regulation

Course code: EC7114

Examiner: Sten Nyberg

Number of credits: 7,5 credits

Date of exam: Wednesday 25 October 2017

Examination time: 3 hours [09:00-12:00]

Write your identification number on each answer sheet. Use the printed answer sheets for all your answers. Do not answer more than one question on each answer sheet.

Use one cover sheet per question. Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked. **No aids are allowed.**

The exam consists of 4 questions. Each question is worth 25 points, 100 points in total. For the grade E 45 points are required, for D 50 points, C 60 points, B 75 points and A 90 points.

Your results will be made available on your "My Studies" account (www.mitt.su.se) on November 15th at the latest.

Good luck!

Question 1

Consider a homogenous good duopoly, where firms are symmetric, compete in prices and profits are zero in a competitive equilibrium. If firms collude total profit is π . If a firm deviates, and sets a ε -lower it grabs π for itself.

- a) Firms play grim trigger strategies, so after a deviation profits are zero forever. What is the critical discount factor δ for sustaining collusion in an infinitely repeated game?

Now, suppose firms can only detect cheating with a probability $\theta = 0.5$. Thus, if a firm cheats, it can go back to the cartel next period, with probability $(1-\theta)$.

- b) What is the critical discount factor making a one-period-deviation unprofitable?

Antitrust enforcement also plays a role in reducing the viability of cartels.

- c) What articles, or acts, prohibit anticompetitive agreements, such as price fixing, in the EU competition law and the US antitrust law respectively?

- d) How does fees and damages affect the incentive for firms to apply for leniency? (Explain the economic logic of the “leniency game”).

Question 2

A vertically integrated incumbent has regulatory duty to provide infrastructure access, and faces competition on the downstream market. Its marginal cost for serving final consumers is $c_1 = 4$. The marginal cost for providing access is $c_2 = 2$, and its marginal cost downstream is thus $c_1 - c_2 = 2$. Its fixed cost upstream is 100. It has no fixed or sunk costs downstream.

Suppose the incumbent sets the downstream price $p = 6$ and the access price $a = 3$. Its downstream sales equals 100 units.

- a) An entrant firm complains that the incumbent is abusing its dominant position through margin squeeze. Is the entrant firm right?

Now, suppose the government decides to regulate the prices on the market.

- b) Suppose the authority sets $p = 6$. What is a according to the ECPR rule?

- c) Suppose the regulator sets p and a optimally subject to the incumbent breaking even (as in Armstrong et al). What is the relation between the optimal a , the ECPR access price and the cost of providing access?

Question 3

A regulator faces a natural monopoly firm with unknown cost and wishes to implement a price regulation that maximizes welfare.

- a) The regulator has heard that the Loeb & Magat scheme is efficient. Describe in detail how it works and what information the regulator needs to implement the scheme.

Distributional concerns make the regulator consider using a Demsetz auction instead.

- b) Describe how a franchise bidding scheme works in principle.

Klemperer discusses how the auction design can affect the outcome of auctions.

- c) Why can it be more difficult to attract bidders with ascending auctions? Why may ascending auctions be vulnerable to collusion?

Question 4 (Credit question)

Exclusive contracts are unlikely to be anticompetitive according to a Chicago school argument. Describe the argument clearly and illustrate it in a graph.

Other models show that buyers may still enter into anticompetitive exclusive contracts. Describe the “exploit the entrant” and “exploit the buyers” arguments in detail. (In the first case, with and without uncertainty about costs, and in the second case, with different assumptions about the incumbent’s offer to buyers). Descriptions can be verbal but must convey the economic mechanisms. To what extent do these models explain foreclosure?