

Course name: Antitrust and Regulation
Course code: EC7103
Examiner: Astri Muren and Sten Nyberg
Number of credits: 7,5 credits
Date of exam: Tuesday, January 13, 2015
Examination time: 3 hours

Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover). Do not write answers to more than one question in the same cover sheet. Explain notions/concepts and symbols. Only legible exams will be marked. No aids are allowed. If you think that a question is vaguely formulated: specify the conditions used for solving it.

The exam consists of 4 questions. Each question is worth 25 points, 100 points in total. For the grade E 40 points are required, for D 50 points, C 60 points, B 75 points and A 90 points. The assignment replaces question 4. If you have completed the assignment but choose to answer question 4 the best score counts.

Question 1

Suppose demand is linear. (i) Discuss how the Hirschman-Herfindahl Index (HHI) is connected to the Cournot model. (ii) Why could a rule of thumb approach for assessing mergers based on HHI and the change in HHI be problematic when firms compete with differentiated products? How can measures such as UPP or IPR be helpful in such circumstances? (iii) Suppose a merger between firms A and B involves no efficiencies, that firm B has a 40 percent margin on its sales and the diversion ratio between A and B is 50 percent. What is the upward pricing pressure for firm A? (iv) Suppose margins and diversion ratio between B and A are symmetric. What would the IPR be in this case?

Question 2

Let the total cost of a regulated firm be determined by three factors: a cost parameter θ which can take values between 3 and 8, the firm's effort e and the cost of effort which is $e^2/4$. Demand is inelastic and equal to 1 unit. The regulator observes accounting cost $c = \theta - e$ but not effort or effort cost.

(i) Consider a price regulation where price is a linear function of accounting cost, $p(c) = a + bc$ with $a > 0$ and $b > 0$. Determine the optimal value of a for three values of b , namely $b = 0$, $b = 0.5$ and $b = 1$.

(ii) Determine the consumer price for two values of θ , namely $\theta = 4$ and $\theta = 7$, given each of these three price regulation schemes (i.e. six prices altogether).

(iii) Do you find any of the regimes better for consumers? Explain, and discuss how the welfare weight of profits affects the regulator's choice of regime.

Question 3

The Loeb-Magat subsidy scheme and the Demsetz auction are different suggested ways of dealing with the problems of natural monopoly markets. Describe the advantages and disadvantages of these methods in comparison with more traditional methods like rate-of return regulation. What conclusions do you draw for practical regulation design?

Question 4 (Essay question)

Discuss the Hart & Tirole model of exclusive contracts and retail competition. Explain the contracting externality, the commitment problem and the rationale for exclusive contracts.

Results will be posted on February 3 the latest. **Good luck!**