



Stockholm
University

Department of Economics

Course name: Law & Economics I
Course code: EC 2105
Type of exam: Main exam
Examiner: Lars Vahtrik
Number of credits: 7,5 credits
Date of exam: Saturday 20 February 2016
Examination time: 3 hours (14:00-17:00)

Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover).

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. Question 4 is a credit question. If you have handed in assignments during the course you may choose to answer this question anyway if you aim at a higher score. Note that in this case the score on the exam will be counted regardless of your score on the assignments!

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 **Thursday 10 March** at the latest.

Good luck!

Question 1

Consider an investor who is able to choose between investing 16 million \$ or not to invest at all in a project that is carried out by an entrepreneur. The entrepreneur can then either cooperate, resulting in a net profit of 8 million \$ for each party, or appropriate the investment in which case the investor loses all the money to the entrepreneur. When the investor does not invest the profit is zero for both agents. The game looks as follows:

		Agent	
		cooperate	appropriate
Principal	Invest	8,8	-16 , 16
	Don't invest	0,0	0,0

- Assume that the principal makes his investment decision before the agent chooses his performance. Draw the extensive form game and find the subgame perfect equilibrium. Will the equilibrium be Pareto efficient? Will the outcome of the game be cooperative? **(8P)**
- Suppose that an enforceable contract gives the investor compensation from the agent amounting to the investment plus the expected profit foregone in case of breach/appropriation. (Perfect expectation damages in C&U) Write down this new extensive form game and find the subgame perfect equilibrium. Will the outcome of the game be Pareto efficient? **(8P)**
- Suppose that there is an uncertainty regarding the cost of carrying out the contract at the time of writing the contract. The entrepreneur can incur a cost of either zero or 20. Will damages amounting to 30 million \$ lead to an efficient outcome in this case? If not, how large should the damages be to ensure an efficient outcome? Draw the extensive form game and analyze the result. **(9P)**

Question 2

- a) There are ongoing discussions whether current copyright laws are inefficient since it is impossible for creators to protect their work from being copied over the Internet. One suggestion is to change the system so that the creators instead are being paid by the government and that the use of the work is instead free. This could for example be financed through a special tax on data traffic over the Internet or computers, smart phones or other devices being used for downloading. Please discuss different aspects of this dilemma from an economic viewpoint and advise whether a change should be made or not. **(10 p)**
- b) One copyright holder, Spielberg, wants to initiate legal proceedings against a small company, Piracy & Co Ltd, making protected material available on the Internet for downloading. Spielberg has monitored the servers for some time and has good data showing how many of his movies that have been downloaded from the servers the past month. Spielberg's lawyers first of all advises him to try to get the courts to grant him an injunction, so that the servers of Piracy & Co can be closed down. Secondly they advise Spielberg to sue for compensatory damages. Please explain why the lawyers would propose both an injunction and compensatory damages (what is the purpose of the two remedies) and how the compensatory damages could be calculated by a court. **(15 p)**

Question 3

- a) An amoral but rational accountant is contemplating to embezzle money from his employer. A punishment in the form of a fine that is larger than the embezzled amount of money may not be enough to deter him from committing the crime? Explain why! There may also be counteracting factors that will ensure that the same fine is more than sufficient to deter the accountant from committing the crime. Name one and explain how it alters the accountants problem. **(6p)**
- b) Assume that our accountant is undeterred by the punishment. How will he decide how much money to embezzle? State the maximization problem and the marginal condition for the optimal amount of embezzlement and draw a graph illustrating the solution. **(7p)**
- c) The solution to the accountant's embezzling problem highlights two policy instruments available to deter crime. Discuss how to use these instruments efficiently. Use your result to explain why the optimal punishment usually includes the maximum fine. **(6p)**
- d) Explain why it may not be a good idea to let the punishment for embezzlement be the maximum punishment possible (fine and imprisonment) even if this is required to deter all embezzlement in society. **(6p)**

Question 4 (Credit Question)

Consider Hart and More's example with the chef, the skipper and the tycoon. Explain the setup in the example and discuss the consequences of different allocations of ownership of the yacht for the incentives to make relation specific investments that increase the value of the cruise. **(25 p)**