



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:** Sunday 18 February 2018  
**Examination time:** 3 hours (9:00-12:00)

**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 only the score on the exam will be counted regardless of your score on the assignments!

**No aids are allowed.**

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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.

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Your results will be made available on your "My Studies" account ([www.mitt.su.se](http://www.mitt.su.se)) on day 8 March at the latest.

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**Good luck!**

## Question 1

An investor can choose to make an investment of 16 in a project carried out by an entrepreneur. If the investment is made the investor incurs an additional cost of 2,5 that is impossible to contract upon or verify in court. If there is no investment both investor and entrepreneur receives zero profits. If the investment is made and the entrepreneur performs the project will generate a surplus of 4 each. The investment problem is further complicated by the fact that the entrepreneur can incur an additional performance cost of 10 or 0 with equal probability after the contract is signed. It is commonly known to all, including courts, that this type of contract generally generates a surplus of two each. Surplus is given without considering the additional costs described above (To calculate profit you need to include additional costs when relevant). Assume that both investor and entrepreneur are risk neutral.

a) Draw the extensive form game in case of

- i) reliance damages
- ii) opportunity cost damages
- iii) perfect expectation damages

and discuss their relative efficiency in providing incentives to invest and incentives to perform and breach the contract in this specific case. **(18p)**

b) Assume that transaction costs for negotiating a contract clause for damages are so high that a gap is intentionally left in the contract. Also assume that perfect expectation damages are costly to verify in court and that the cost of verifying opportunity cost damages is low due to the abundance of similar standard contracts. Establishing reliance damages is assumed to be costless. Use efficiency arguments to discuss if and how the court should fill the gap in the contract and or supply default rules under these circumstances. **(7p)**

## Question 2

The notorious criminal JACK contemplates robbing a drugstore. He knows that there are drugs worth 1200 \$ in the store. The street market value of these drugs amounts to 1000\$. To break into the drugstore JACK needs to break a door with a value of 75\$. There is only one person, the owner, working in the drugstore and the store does not have an alarm so the probability that JACK will be caught by the police and get arrested is quite low,  $p = 0,30$ .

- a) How much should JACK pay in damages to perfectly compensate the drugstore owner? Discuss why perfect compensation may not be possible in criminal suits in general. **(5p)**
- b) Assume that JACK is risk neutral. Define and state the sum of perfect disgorgement. How large does a fine have to be to deter JACK from committing the robbery given that he is required to return the money if he is caught? Alternatively assume that JACK is required to perfectly compensate the drugstore owner if he is caught and then recalculate the fine needed to deter JACK. **(7p)**
- c) Discuss how JACK' s incentive to commit robbery changes with less resources allocated to the police, reducing the probability of being arrested ( $p$ ), and a higher fine ( $f$ ) given that expected cost of committing the crime is unchanged? Will your answer be different if we assume that JACK is risk averse? **(7p)**
- d) The drugstore owner contemplates installing a burglar alarm. She can either buy a clearly visible and loud alarm or a hidden silent alarm. Discuss if it is socially efficient to make the owner' s investment in a burglar alarm tax deductible in these two separate cases. **(6p)**

### Question 3

- a) The Jackson family visits a lawyer to discuss how to handle a big estate that they have inherited together. One part of the family wants to have access to the buildings on the property different times of the year, another part wants to use the lake and river (possibly to build a smaller power plant), a third part would like to cultivate the land and a fourth part wants to have the right to hunt. The lawyer explains to the family that it is not possible to divide ownership based on their current preferences (since it is not possible to divide the use of the estate through ownership rights) and suggests that they own the estate together and enter into an agreement dividing the right to use the different parts of the estate. Please explain from an economic perspective why we have limitations on how we can divide ownership to property and whether the law should allow the possibility to create ownership over the right to use all or part of real property. **(10 p)**
- b) A year after the family has entered into the contract between not less than 25 individuals (who each had inherited a part of the estate), two of the family members (who have the right to use the river and the lake) realises that they cannot build a power plant due to new zoning regulations. Hence, they want to amend the agreement so that they instead can use some of the buildings for a new venture within river rafting. The rest of the family refuses to make any changes, even though they are all happy that the power plant is not built. Some of them had even written letters to the municipality to argue for the new zoning regulations. Please discuss from an economic viewpoint if the agreement should be enforceable. **(10 p)**
- c) The two family members who wants to have the agreement amended (or declared invalid) decides to go to court. The lawyer who drafted the agreement included an arbitration clause, i.e. a clause saying that any dispute should be solved by an arbitral tribunal and the parties must pay not only for their own lawyers but also for the arbitrators (judges). Please discuss if this clause should be enforceable and the economic benefits and drawbacks of such a clause. **(5 p)**

#### Question 4 (Credit Question)

- a) Explain the problem of efficient precaution in tort law with the help of a graph depicting the efficient level of precaution and explain the marginal condition illustrated. **(10p)**
- b) Assume that a plumber has the choice of installing a budget pipe at a cost of 2200, a safe pipe at a cost of 3200 and an extremely safe pipe at a cost of 4600 in a house. If the pipe should brake the damage would amount to 900000. In the case of the budget pipe an accident will occur in one out of one hundred installations. In the case of the safe pipe an accident will occur in one out of two hundred installations. In the case of the extremely safe pipe an accident will occur in one out of three hundred installations. Use your findings in a) to establish which pipe our plumber should choose to avoid negligence and liability for damages. **(15)**