

# Worksheet 1&2 (for Lecture 1&2) , Feb 17 and 24, 2015

## Environmental Economics in the Central European Context

I advise you to work through the following problems /questions well and as a group (make sure though that no one is free-riding); it's the ticket to performing reasonably well on the exams. Number of points indicates the expected scope of the answer (should roughly correspond to time in minutes).

1. **[10 points]** Which is, in your opinion, the greatest challenge for current environmental policy? Explain.
2. **[10 points]** What is externality? Provide an example (preferably environmental) and discuss. Can you think of a way how to correct for externality in your example?
3. **[10 points]** What are the main attributes of public good? Using an example, explain how and why a free rider problem can naturally arise. Can you think of solution?
4. **[14 points]** Briefly summarize an in-class experiment on public good that we did in Lecture 2.
  - a. [2] What were the main differences between the three rounds (each consisted of 5 periods)?
  - b. [2] What is the expected impact of those changes (make sure to comment on both parametric change as well as communication time)? Did your group behave in line with expectations?
  - c. [3] Why do you think open discussion is important? Did your group manage to coordinate? Explain what happened.
  - d. [2] Why would you contribute to public good? Why would you not?
  - e. [3] What was wrong with the reward scheme used by the experimenter? Can you suggest a better reward scheme that would support the expect behavior in the lab? Explain.
  - f. [2] What is the main thing that you learned from that experiment?
5. **[10 points]** "The rational man finds that his share of the cost of the wastes he discharges into the commons is less than the cost of purifying his wastes before releasing them. Since this is true for everyone we are locked into a system of "fouling our own nest." (Hardin, p. 1245) Discuss.
6. **[5 points]** Solve Problem 1 from Schotter's textbook, 2<sup>nd</sup> edition, p. 585 (in the 3<sup>rd</sup> edition it is Problem 1 on p. 651).
7. **[10 points]** Explain what are the possible problems with implementing Pigouvian taxes and Standards and charges? Illustrate with a real-world example.
8. **[20 points]** Briefly summarize the main objectives and main results of Plott (1983). How does he model externality in his experimental market? Describe how are the individual interventionist solutions implemented in his experimental market? Why are the results for the standards solution noisy?