



Graduate Program in Economics
University of Indonesia

Midterm Exam
Environmental and Natural Resource Economics
Academic Year 2005/2006
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150 mins.

Note: 1) This is an open-book exam. However, no discussion allowed. Any indication of academic misconduct will be prosecuted. 2) Answer all questions, but be brief and clear. Each question weighs 20 percent. 3) As you will see soon, the following questions are not completely black-and-white problems. Two persons might see things differently and therefore have different claims; nonetheless neither of them is wrong, as long as he/she provide a reasonable flow of argument. So, it is your argument that matters. 4). **Please do number 4 and 5 in a separate sheet.**

1. What is property right? Why is it important in ensuring the market work? When property rights are not defined or ill defined, how might resources be allocated among users? If instead, the property right is clearly defined, does it matter who has it? Why or why not? Use an illustration to make all your arguments clear (don't use *my* example).
2. We often hear, government role is justified in the case of externality problem (esp. negative externality). Why? What did Pigou recommend to deal with externality problem? What was Coase response to Pigou's approach? Give an example of situation where Pigouvian approach might be more effective and an example of situation where Coasian approach is preferable. Explain your arguments.
3. What do we mean by *government failure*? How does it differ with *market failure*? Explain the process the leads to both failures. In the case where the economy suffers from both failures, what is your recommendation? Use an illustration and explain your argument.

Numbers 4 and 5 next page.

4. For practical purposes, we separate natural resources into those that are renewable and those that are nonrenewable. There is, however, a caution regarding this distinction. What are the natural economics implications of this distinction? Natural resource economics emphasizes economic dynamics and decision-making in an intertemporal setting. It involves decision making over time. With natural resources, dynamics is essential. Distinguish between interest rate, compounding, and discounting or getting present value and give an example of each kind.

5. Benefit-Cost Analysis (BCA) is often called a test for efficiency, and with some justification. From the definition of BCA as an empirical test for PPIs, there are four principles should be considered. Explain.

Good luck and see you later!

(I bet now you see why I said we'd prefer discussion in class to lecturing)