Assignment #1

Answers

1. State in your own words the relationship between efficiency and “perfectly competitive markets”.

I was looking here for an answer that was able to provide some evidence that you understood that perfectly competitive markets (which would include zero transaction costs) will automatically lead to prices which will result in efficient outcomes. Efficiency meaning that there are no further gains from trade and thus the allocation of goods, services and other resources is the best distribution (ie highest social welfare) it can be, assuming agreement that the starting initial allocation of resources was appropriate.

2. What is the relationship between nonattenuated property rights and efficiency? Between nonattenuated property rights and perfectly competitive markets?

A good answer would have defined carefully what nonattenuated property rights are—following Randall’s chapter 8 reading. Nonattenuated property rights are the same thing as a perfectly competitive market—thus nonattenuated property rights ensure efficient outcomes.

3. What is the second best problem? Why is it a problem? Is there a resolution to this problem? If so, what?

The answer to this question is difficult in part because textbooks tend to be vague about it. The second best problem is one that stems from this situation: where there are more than one source of market failure, correcting just one of these to achieve marginal cost pricing, will not necessarily improve overall efficiency in the economy. An example might be correcting an air pollution externality from an industry only to find that it worsens a water pollution externality. That is, the air and water emissions are not independent of one another. For example a firm might find its air emissions taxed but not its water emissions; so the air gets cleaner but the water dirtier with an air emissions tax. The second best problem was identified in 1957 by Lipsey and Lancaster1, and they noted that for all practical purposes the calculation of the correct conditions for a second best solution is impossible.

And while your Randall reading suggests—following Davis and Whinston that there are unique conditions under which the second best problem does not apply, Mishan notes that these exceptions are too far removed from the real world to enter into the analysis of “any practical prescriptive propositions.” (p. 526). Thus, we can say that there are few

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situations under which a first-best solution is actually attainable, so we must consider second best solutions.

So, does the second best problem mean there is nothing for economists to say about appropriate tax rates, correcting externalities and the like? Well it does suggest that piecemeal recommendations to establish marginal cost pricing without thought about what might be happening throughout the rest of the economy as a result of those recommendation are unwarranted. In the example in the first paragraph, a second-best solution is to, say, tax to correct the air emission problem, but to adjust the air emissions tax to account for the fact that there will be some external effects associated with the air tax.

The existence of the second best problem also suggests that some particularly complex problems might be best approached with computable general equilibrium models.

Still, it is true that no simple rule emerges that would guide an economist to a second best solution. However, the lack of a simple rule does not mean that economists have nothing to say about how to produce and distribute output or how to reduce negative externalities. It is generally assumed in economic analysis that—in general—whatever is being produced, it is better that it be produced more efficiently than less (ie at least cost) and that it is better if the distribution of output be done more efficiently rather than less. The lack of a simple rule implies careful analysis of a situation on a case by case basis. The economist should attempt to understand the conditions surrounding the market failure fully to better understand the relationship between a market failure, the proposed correction, and ultimately social welfare.

A second best outcome then is one where at least the gains from the imposition of a policy (e.g. tax) exceed the losses, even though the analyst is not certain an optimal outcome has been reached.

4. Can efficiency analysis be used to unequivocally state what should or should not be done in correcting an externality problem? Why or why not?

Efficiency analysis involves using the definition of efficiency to ascertain deviations from efficient pricing and usually involves using an instrument such as taxes to correct these deviations (ie market failures) in order to make prices equal to true marginal social costs (ie social values).

5. How is an externality related to transactions costs? Explain.

Bromley’s writings make clear, as does Coase’s theorem, that with zero transaction costs, there would be no externalities. All externalities would be bargained away since it would be costless to bargain.
6. What does it mean to say that open access resources exhibit characteristics of rivalry but not excludability? Is the same true of a common property resource?

Good answers would state with good definitions. Rival goods and services are those where the consumption or use by one individual reduces the amount available for the next individual. An example would be that if a fisher takes a tuna from the sea, then there is one less tuna for others to catch (and maybe impacts on future tuna populations too). Some resources are nonrival until they are congested. See Randall. Excludability refers to an attribute of a resource, where there is an affordable-cost way of excluding potential demanders/users from using the resource. An example would be an enforceable, enforced property right around a privately owned piece of land. Open access resources such as ocean fisheries tend to be rival but not excludable…but common property resources—such as a forest area owned in common by a village—tend to be rival and excludable.