

UNIVERSITY OF COLORADO AT BOULDER
Economics

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Class: Econ 4211 Semester: Spring 2008 Date: May 2008

Final Exam (Review)

Student Name: _____

Student ID: _____

Econ 4211
Sample Final Exam

A Government Spending. (Choose 1 out of 2)

1. Should a state (government) run a national pension system? Justify your answer.
2. A politician claims that government should intervene in the education market to “even the playing field” for rich and poor families. Which justification for government intervention in the education market is the politician using? Should government intervene in this market? Justify your answer.

B Taxation. (2 problems)

1. See q. 12, ch. 19, p. 544 (old edition), p.574 (last ed)
2. Consider a market with the following supply and demand:
$$Q_d = 10 - P_c$$
$$Q_s = \frac{P_p - 2}{3}$$
 - a. Calculate the initial equilibrium in this market.
 - b. Suppose a unit tax of one dollar is imposed on consumers. Calculate the equilibrium quantity and the price paid by consumers and price received by producers.
 - c. Will your answer to the previous question change if the unit tax is levied on producers?
 - d. Who bears higher burden of the tax? Why? Demonstrate your answer using (calculated) elasticity of supply and demand.
3. See q. 13, ch. 20, p. 578 (old edition), p 607
also
a variant of q. 15 new edition:
4. The demand for snorkels in Bergama is given by $Q_s = 500 - 8P_s$, the supply is perfectly elastic, with marginal cost of production 10. The demand for kayaks is $Q_k = 650 - 6P_k$, their supply is perfectly elastic, with marginal cost of production 15. Both goods are currently untaxed but the government needs to raise \$500 in tax revenues. What tax should be levied on each of the two goods assuming no income effects in both markets.
5. See q. 13, ch.21, p. 605 (old edition) p. 633, new edition.
6. Last HW, problem 1

C Political Economy (1 problem)

1. See q. 12, ch.9, p. 245 (old edition)
p. 255 (new edition)
2. Three regional representatives (N, W, R) are responsible to decide whether to build a new airport (A) and whether to construct a big dam (B). For each one the value of the “status-quo” (no project is undertaken) is 0. They use majority rule to make decisions, voting on A (versus no A) and then on B (versus no B). Their (net: benefit-cost) valuations can be summarized in the following table:

Voter	Airport	Big Dam
N	5	-3
W	-3	5
R	-3	-3

- a. (5 pts)** If no logrolling is possible, will A be constructed? Will they decide to construct B ? Is this outcome socially desirable?
- b. (5 pts)** Assume now that they can credibly “trade votes” (so that the promise to vote for a project by any individual is credible, i.e., it can be enforced). Will they decide to construct A ? And B ? Is this outcome socially desirable?
- c. (5 pts)** Assume that neither of the projects generates any inter-regional externalities and the reason R 's net benefit is negative is the cost imposed due to the equal cost sharing for each project. How can the problem you have detected in b . be alleviated? Is your answer still true if most of the negative benefit imposed on region R comes from negative externalities (e.g., noise and pollution from the airport, flooded lands due to the dam construction, etc.)