

Econ 4620 Public Economics S2012: Seminar assignment for week 16

Pending question: Problem 4

Suppose that we extend the Mirrlees income tax model to include commodity taxes and a negative externality. You may assume that the externality is a damage to the environment, which may be considered as a public good. Reasoning within this framework, sketch the effects that you would be concerned with when setting the tax on the externality-generating good.

Problem 1 (interpretation of mathematical expression)

a) Interpret

$$\frac{dU}{\alpha} = t dX + \tau dL - t_1^P dX_1 = \sum_k t_k dX_k + \tau dL - t_1^P dX_1$$

on p. 201 in Salanié's book. (For notation see the book.)

Problem 2 (essay type question)

Discuss trade-offs that can arise when considering the general level of taxation of capital income.

Problem 3 (application type question)

Suppose the imputed return to owner-occupied housing is taxed at a lower rate than the return to other capital. Discuss this tax setting from a social efficiency perspective.

Problem 4 (presentation and explanation)

- a) Give an account of the main structure of the Norwegian shareholder income tax.
- b) What are conceivable arguments for having a shareholder income tax?
- c) What is the case for shielding the normal rate of return from the shareholder income tax?

- d) Would you expect current shareholders to earn large above-normal profits?

Problem 5 (definitions)

Define

- a) depreciation allowances ,
- b) declining balance method ,
- c) lock-in effects,
- d) residence principle of taxation

Problem 5

Assume there is a population of heterogeneous agents supplying labour (h) at fixed but different wage rates (w) and paying a linear income tax. The tax liability of a person is given by $ty+T$ where $y=wh$ is income and t and T are parameters of the tax function. Besides a private good (private goods) being available, a public good is provided by the government. The consumers have a utility function with the private good(s), the public good and labour (leisure) as arguments. Labour is (weakly) separable from the other arguments. Assume that the marginal benefit of the public good is the same for everybody.

Does the Samuelson rule apply?

Problem 6

Consider three electricity tax regimes where an excise tax is levied on electricity.

- a) An electricity tax only on consumers
- b) An electricity tax only on firms
- c) An electricity tax on firms exempting energy-intensive production.

Discuss conceivable arguments for/against the tax in each case. (Recall that electricity is a produced input.)

Problem 7

- a) The financial sector is VAT-exempt in the sense that it charges no VAT and pays VAT on its inputs without refunding. Mick Keen, Head of the Tax Division of the MIT, argues that such rules imply that business users of financial services are over-taxed while final consumers are under-taxed. Discuss these arguments.

- b) A government-appointed committee in Norway (“Finanskriseutvalget” – NOU 2011: 1) advocate considering a tax similar to VAT also on financial services. Discuss the case for such a proposal.