

Comments on answers given by candidate 17171, ECON4620 1 Public Economics 1. Grade A.

Problem 1

- a) Overall a very good answer, however, could have been somewhat more precise when explaining the investment decision.
- b) A very good answer again. The difficulty of setting the “correct” interest rate for equity could have been mentioned, but merits acknowledged.

Problem 2

- a) Not much to add here, very well answered. A significant share of candidates confused government with society and answered that the gain to society was simply the extra tax collected. This is wrong- with no change in behavior the extra tax collected is only a transfer of money. The real gain to society is the value of the extra hour worked.
- b) The candidate refers to the envelope theorem and claims that $k'(e)=t$ in optimum. This is correct. But the calculations are somewhat hard to follow. The candidate seems to be confused concerning implications of convexity, which is a deficiency, but is not
- c) This was a question which many candidates did not answer or answered incorrectly, good to see a correct one.

Problem 3

- a) The candidate is somewhat unclear. Anonymity has nothing to do with this question, neither has the Ramsey model. The point is simply that such a tax acts in the exact same way as a flat income tax. This can easily be seen from the budget equation for the consumer.
- b) Tax more the goods complementary with leisure is correct. But does not explain much. We tax goods complementary with leisure to counteract the effect of tax on labor. The last sentence is somewhat confusing though. High (- or low) type is not relevant in this context.
- c) It is correct that commodity taxes are not needed and will only impose distortions. However, the candidate does not explain much. The point is that since we observe the types, we can implement the first-best solution (use lump sum taxes conditioned on types).

- d) The candidate realizes that the problem arises because of asymmetric information. Further, the explanation with the two-type model is, at least partly, quite good. However, it remains somewhat unclear. The point is that by imposing some distortion on the low-type we make it unattractive to mimic for the high-type. Although not perfectly clear, we interpret he/she to understand.
- e) It is correct that due to the Atkinson-Stiglitz theorem, we do not need commodity taxation when preferences are separable between leisure and commodity demand. The candidate is not too precise when it comes to explaining why this is the case. The reason we might use commodity taxes when preferences are non-separable is associated with the attractiveness of mimicking. Since a mimicking high-type will consume more leisure compared to a low-type, he will also consume relatively more goods complementary with leisure compared to the low-type. We can make it less attractive for him to mimic by introducing tax on those goods complementary with leisure. This means that the self-selection constraint becomes less tight, and the distortion we impose on the low-type is reduced.

Conclusion:

The first two problems are very well answered (A), while problem 3 is the weakest part (B). In particular, the challenging Problem 2 is very well handled. Overall, the candidate gives a very solid impression and is rewarded with grade A. Since there are some weaknesses, it must be characterized as a borderline answer, just above the threshold for A.