AdvMacroHet-2022: Grading

Assignment I

1. Ad a) Correct definition of the stationary equilibrium in). Perhaps in matrix form.
2. Ad b) Correct solution for stationary equilibrium in. Show policy functions and distribution.
3. Ad c) Illustrate how interest rate and wages change with taxes in.
4. Ad d) Some discussion in terms of average utility and inequality (across ex ante and ex post types).
5. Ad e) In terms of average utility labor income taxes are preferred to capital income taxes. Also conditional on type .
6. Ad e) Capital income taxes *can* have distributional benefits in terms of lower inequality (income, wealth or utility).
7. Ad g) Example of improvement of tax system: A lump-sum transfer to the poor. Improves average and with-type average welfare.

Assignment II

1. Ad a)+b Correct implementation of non-linear and linear solution.
2. Ad a) Step-by-step explanation of the transmission mechanism. Preferably including decomposition.
3. Ad c) More flexible prices and weaker transmission mechanism.
4. Ad d) Correct implementation. Discussion of smaller effects due to MPC < 1, so smaller first round effects.

Assignment III

1. Correct mathematical and verbal formulation of model.
2. Clear connection between model, data and proposed experiments.
3. Extra points for novelty and complexity.

Exam

During the exam the students were informed that the original calibration implied that the goods market was not clearing. Either the students could continue with the original calibration or use an error-free one with $\overline{\pi}_\chi = \underline{\pi}_\chi = 0.5$*. This did not impact the grading.*

1. The extensions allowing for $\sigma_\beta > 0$, $\sigma_\chi > 0$ and $\kappa > 0$ are implemented correctly.
2. The mechanical and behavioral effects of the parameter changes in question a)-c) should be discussed.
3. When increasing σ_ψ the effect of precautionary saving should be discussed.
4. For $\sigma_\beta > 0$ the difference of ex ante and ex post heterogeneity should be discussed
5. For $\sigma_\chi > 0$ the mechanical effect on wealth skewness from a series of positive draws should be discussed.
6. In question d), the benefit of $\sigma_\beta > 0$ is that it implies wealth inequality without increasing (labor) income inequality.
7. In question d), the benefit of $\sigma_\chi > 0$ is that it implied more wealth skewness without increasing wealth inequality.
8. The transition path should be implemented correctly for question e) and the relevant paths shown.
9. The policy in question f) should be implemented correctly and some discussion in terms of inequality in (expected discounted) utility should be included.