

Macroeconomic Theory II: Exercise list 1

To be handed in by January 15, 2020

1) RBC Model

Read the Cooley/Prescott paper cited in the syllabus (skip Section 5) and the class handout.

If you do not have the book, you can download this chapter at

http://online.sfsu.edu/mbar/ECON702_files/Cooley%20and%20Prescott%201995.pdf

Then

- a) Consider the household problem (20) in the Cooley/Prescott paper, and derive the household first conditions for labor supply and for the consumption decision (Euler equation). [Hint: use the Lagrangian of this problem.]
- b) Consider the transformation from a model with long-run growth (technology and population) as in the Cooley/Prescott paper to a model with stationary variables, as in the handout. This can be considered as just a re-parameterization. How do the parameters change going from the growth to the stationary model?