

Christiano
416, Spring 2008
Homework 6, due May 22.

1. Consider the Rotemberg model that you studied in homework 4. Compute the Ramsey equilibrium using Andy Levin's software, which is provided on the course website, with a detailed readme file to help you use the code. The basic idea is that you have to prepare a Dynare program with the model, as though you were going to solve the model with an exogenous monetary policy rule. Small adjustments have to be made to this code. Then, you execute a couple of commands to indicate the name of the mod file where the model is, and the name of the mod file that you want to contain the Dynare code with the Ramsey equilibrium conditions (the code replaces the monetary policy rule in your program with all the first order conditions associated with the Ramsey problem). Then, you execute `get_ramsey` at the MATLAB command prompt, and the software writes the new Dynare file. You then have to go in and clean that file up a little. In addition, you have to put together some code for computing the steady state. One of the outputs of `get_ramsey` is a key piece of code that helps you with this. Again, the details are in the readme file that is online.

Verify by comparing with your results in homework 4, that `get_ramsey` computes the Ramsey first order conditions correctly, and solves the model correctly.

2. Compute the Ramsey equilibrium for the closed economy, Calvo sticky price model described in the lecture notes. Do the calculations for the case in which the labor subsidy is zero. Is there a time consistency problem in this case?