

Homework #2: Real Business Cycles

Econ 690: Numerical Methods

Fall 2016

The purpose of this homework is to start you in the modern macro literature and practice value function iteration.

Read Hansen (1985)

Read Gary Hansen's 1985 JME article "Indivisible Labor and the Business Cycle." What is his most unrealistic assumption? Why does he make it? What are his core results?

Replicate

Replicate Hansen's second and third panels of Table 1 using VFI. Your numbers will not be exactly equal to his. You may choose to take the expectation of the value function (solve the stochastic version), in which case I suggest you discretize the shocks as we did with Sargent & Ljungqvist. Take liberties if you need to.

Improve

Attempt to improve some aspect of Hansen's model: explain what you expected and what the results were. Be original and thoughtful.