

ECON747 – Problem Set 3

Due date: March 28th, 2013, at the beginning of class

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Managing Credit Booms and Busts

Write the computer code and simulate the following aspects of the paper “Managing Credit Booms and Busts: A Pigouvian Taxation Perspective” by Olivier Jeanne and myself. (You can download the sample program at <http://www.korinek.com/download/boombust.m> and build on it.)

1. Generate a series of output shocks (including booms and busts) and simulate the path of consumption and the asset price for a number of periods.
2. Solve for the social planner’s allocation. Determine numerically what is the optimal Pigouvian tax in the high steady state of the benchmark calibration (SMEs)?
3. Pick a country of your choice (other than the US) that has recently experienced a financial crisis and adjust the calibration to capture it. Describe your calibration approach and quantify the magnitude of externalities.