

ECON 899A - Problem Set 5

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10/13/2021

This problem set was based on Krusell and Smith (1998).

My code is organized into six scripts:

- `01_parameters.jl` contains the parameter structures including model primitives, grids for aggregate productivity, employment, individual capital, and aggregate capital.
- `02_initialize.jl` contains the results structures and the code to simulate aggregate productivity shocks and employment shocks for a panel of agents.
- `03_value_function.jl` contains the code for value function iteration.
- `04_solve_model.jl` contains the code for simulating the aggregate capital path, estimating the AR(1) capital regressions, and converging on coefficient and R-squared estimates.
- `98_test.jl` contains tests for the functions in the other scripts.
- `99_run.jl` runs the last function from the previous script and prints out results for this write-up.

I find that $a_0 = 0.119$, $a_1 = 0.947$, $b_0 = 0.203$, $b_1 = 0.997$, and $R^2 = 0.997$.

*This problem set is for ECON 899A Computational Economics taught by Dean Corbae with assistance from Philip Coyle at UW-Madison. I worked on this problem set with a study group of Michael Nattinger, Sarah Bass, and Xinxin Hu.