ECONOMETRICS II, FALL 2025

Homework 4. Due Monday September 22nd.

- 1. Use the posted program to replicate the study by Hansen and Singleton. Try and estimate the model using 3–5 different sets of instruments. Try a set of instruments which you may think is good (argue why) and one which you may think are bad. Try different lag-lengths. Try using a lot of instruments and try to use just a few. Comment on your results. Are the results stable to the choice of instruments? (The Euler equation is difficult to estimate, partly because risk aversion and patience have similar effects in environments where we do not have a lot of risk, so you may well have combinations that do not converge and you just label that as a non-convergence.)
- 2. Change the program to estimate some versions (varying instruments) of the model that Nelson and Starz (J Buss. 1990) use to demonstrate how weak instrument can lead to really misleading result (use real data given). Are the results stable to the instruments, do you think they are weak?