

Quantitative Macroeconomics
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Homework 1, due Feb 9

Question 1.

Retrieve quarterly U.S. data from 1947.I to the most recent date that you can find. Use NIPA and FAT accounts for this exercise.

1. Compute ls as we have described in class, describe its behavior.
2. Use series of output per capita, y , total hours per capita, eh , employment per capita, e , hours per worker, h , consumption per capita, c , investment per capita, i , your ls construct and its associated labor productivity y/eh and wages w to report the following business cycle moments:
 - Report the absolute variances, the persistence and the comovement with output (correlation) of $y, eh, e, h, w, lp, ls, c$ and i . In your report, use exactly that same order of variables.
 - Report the phase shift of each variable with output.
 - Report also the correlation matrix for y, eh, e, h, w, lp and ls . I want you to report an upper triangular matrix with the variables in that order.

Discuss your most important findings.

3. Redo the previous item from 1947.I to 2007.IV. Did the "Great Recession" change the business cycle facts? Discuss.