

# Economic Dynamics

## Homework 5: Due November 25, 2016, 11:00am

### Requirements

Submit your homework *by email to*

"Economic Dynamics" <dynamics-hw@turnbull.sk.tsukuba.ac.jp>

The **Subject:** should be FH21051 Homework #5 (in hankaku romaji). Use this class number, even if you are registered according to a different code. Your email must contain your *name* and *student ID number*.

### Problems

This exercise concerns *dated commodities* and *dated technology (production functions)*.

1. Let  $F_t(K, L)$  denote Toyota Company's production function for cars in year  $t$ .
  - (a) What does  $F_{2006}(K, L) < F_{1996}(K, L)$  mean?
  - (b) Do you think the inequality in (a) is a historical fact? Explain why or why not.
  - (c) What does  $F_{2006}(K_{2006}, L_{2006}) > F_{1996}(K_{1996}, L_{1996})$  mean?
  - (d) Ignoring historical facts about Toyota, is it logically possible for both (a) and (c) to be true? Explain why or why not.