Course Description
We will survey recent research on the aggregate implications of nonconvex factor adjustment costs. We will examine their effect on the long-run distribution of investment and job turnover, and on aggregate fluctuations. Lectures will cover both empirical papers that provide evidence of these nonconvexities with quantitative equilibrium research that attempts to assess the aggregate implications of such phenomena. An additional focus of the class will be on numerical methods that allow us to address some of the heterogeneity seen in the data using stochastic dynamic general equilibrium models.

Outline

1) A brief review of quantitative business cycle analysis

   The data


Quantitative business cycle models


2. Nonlinear numerical methods: solving the indivisible labour model using splines

The indivisible labour economy


Rogerson, Richard ‘Indivisible labor, lotteries and equilibrium’ Journal of Monetary Economics, Volume 21, Issue 1, January 1988, Pages 3-16


Spline approximation


3. Lumpy investment

Empirical evidence and partial equilibrium analysis


Cycle: Lumps and Bumps” *American Economic Review* 89


Doms and Dunne (1998) “Capital Adjustment Patterns in Manufacturing Plants” *Rev. Economic Dynamics* 1

**General equilibrium analysis**


**Numerical methods for solving heterogeneous agent models**


**4. Job Turnover with firing costs**


