Economics 212b: Dynamic Games: Recursive Methods and Its Application

Instructor: Ichiro Obara
Bunche 9381
E-mail: iobara@econ.ucla.edu
URL: http://www.econ.ucla.edu/iobara

Office Hour: By appointment

Time and Location: Wednesday, 5:10pm~8:10pm, Bunche 2249

Textbooks:

  Ch 1, 2, 6, 7, 8, 9 are available at http://www.econ.upenn.edu/~gmailath/book.html (the first accessible textbook on repeated games. Out in June).

Grades:

Problem sets and a short paper to be submitted in the end of the quarter. The final grade will be based on them (60% on the problem sets and 40% on the paper).
**Reading List:** The lecture will proceed according to the order of the following reading list. I plan to talk about the papers with ** and *, although I may skip (*). I really recommend you to read the papers with **. You won’t regret it. In making this list, I decided not to touch the issue of (persistent) incomplete information such as reputation, assuming that David covered some of them.

1. **Repeated Games with Perfect Monitoring** (Ch1, 2 of M&S)

**Dynamic Programming Approach**

**Monotonicity of Equilibrium Payoff Set**

**Folk Theorem**
Penal Code


Finitely Repeated Games


Renegotiation in Repeated Games


2. **Applications (1)** (Ch6 of M&S)

Price Wars


(For non i.i.d. demand shocks)

Risk Sharing without Commitment


**Time Inconsistency**

3. **Repeated Games with Imperfect Monitoring** (Ch6,7,8,9 of M&S)

**Dynamic Programming Approach**

**Folk Theorem**

**Private Strategies**

**Timing of Information**

4. **Applications (2)**

**Price Wars**

**Collusion in Repeated Auction**

(Background)


(Tacit Collusion)

• *S. Athey and K. Bagwell (2004), “Collusion with Persistent Cost Shocks,”

(With Communication)


**Relational Contract**


4. **Dynamic Games**

**Asynchronous Repeated Games**


**Folk Theorem**


5. **Repeated Games with Private Monitoring**
Survey


Folk Theorem

- J. Horner, and W. Olszewski (2005), “The Folk Theorem for Games with Perfect Almost-Perfect Monitoring (folk Theorem with almost perfect private monitoring for general stage games).”

Folk Theorem with Communication


6. Repeated Games in Continuous Time