

Economics 211b: Dynamic Games: *Recursive Methods and Its Application*

Reading Lists (I strongly recommend you to read papers with **. I will also talk about papers with * during the class, which you are encouraged to at least take a look.)

0. Useful Textbooks etc.

* D. Fudenberg and J. Tirole, Game Theory, MIT press, 1991.

R. Myerson, Game Theory: Analysis of Conflict, Harvard, 1991.

D. Fudenberg, Repeated Games: Cooperation and Commitment, in Volume I of Advances in Economic Theory 6th World Congress, Cambridge Press, 1992.

D. Pearce, Repeated Games: Cooperation and Rationality, in the same volume.

1. Repeated Games with Perfect Monitoring

D. Abreu (1986), "Extremal Equilibria of Oligopolistic Supergames," *Journal of Economic Theory*, 39.

* D. Abreu (1988), "On the Theory of Infinitely Repeated Games with Discounting," *Econometrica*, 56.

** D. Abreu, D. Pearce, and E. Stacchetti (1990), "Toward a Theory of Discounted Repeated Games with Imperfect Monitoring," *Econometrica* 58.

** D. Fudenberg and E. Maskin (1986), "The Folk Theorem in Repeated Games with Discounting or with Incomplete Information," *Econometrica* 54.

2. Applications (1)

(a): Price Wars (i)

* J. Rotemberg and G. Saloner (1986), "A Supergame-Theoretic Model of Price Wars during Booms," *American Economic Review* 76.

(b): Sustainable Policy

R. Chang (1998), "Credible Monetary Policy in an Infinite Horizon Model: Recursive Approaches," *Journal of Economic Theory* 81.

* V.V. Chari and P. Kehoe (1990), "Sustainable Plans," *Journal of Political Economy* 98.

L. Ljungqvist and T.J. Sargent (2000), "Recursive Macroeconomic Theory," Ch 16.

C. Phelan and E. Stacchetti (2001), "Sequential Equilibria in a Ramsey Tax Model," *Econometrica* 69.

3. Repeated Games with Imperfect Monitoring

D. Abreu, P. Milgrom and D. Pearce (1991), "Information and Timing in Repeated Partnerships" *Econometrica*, 59.

** D. Abreu, D. Pearce, and E. Stacchetti (1990), "Toward a Theory of Discounted Repeated Games with Imperfect Monitoring," *Econometrica* 58.

** D. Fudenberg, D. Levine and E. Maskin (1994), "The Folk Theorem with Imperfect Public Information," *Econometrica* 62.

* M. Kandori and I. Obara (2001), "Efficiency in Repeated Games Revisited: the Role of Private Strategies," unpublished.

* R. Radner, R. Myerson and E. Maskin (1986), "An Example of a Repeated Partnership Game with Discounting and with Uniformly Inefficient Equilibria," *Review of Economic Studies* 53.

4. Applications (2)

(c) Price Wars (ii)

D. Abreu, D. Pearce, and E. Stacchetti (1990), "Optimal Cartel Equilibrium with Imperfect Monitoring," *Journal of Economic Theory* 39.

** E. Green and R. Porter (1984), "Noncooperative Collusion and under Imperfect Price Information," *Econometrica* 52.

(d) Dynamic Labor Contract

G. Baker, R. Gibbons, and K.J. Murphy (1994), "Subjective Performance Measures in Optimal Incentive Contracts," *Quarterly Journal of Economics* 109.

G. Baker, R. Gibbons, and K.J. Murphy (2001), "Relational Contracts and the Theory of the Firm," *Quarterly Journal of Economics* (forthcoming).

* Yeon-Koo Che and Seung-Weon Yoo (2001), "Optimal Incentives for Teams," *American Economic Review* 91.

J. Levin (2001), "Relational Contracts", unpublished.

W.B. Macleod and J.M. Malcomson (1989), "Implicit Contracts, Incentive Compatibility, and Involuntary Unemployment," *Econometrica* 57.

5. Learning and Experimentation in Dynamic Games

Multi-Armed Bandit

J.C. Gittins (1989), "Multi-Armed Bandit Allocation Indices," Chichester, Wiley.

* D.P. Bertsekas (2001), "Dynamic Programming and Optimal Control, Vol. 2," Athena Scientific.

Applications and Extensions

- * D. Bergemann and J. Valimaki (1996), "Learning and Strategic Pricing," *Econometrica* 64.
- P. Bolton and C. Harris (1993), "Strategic Experimentation," *Econometrica* 67.
- M. Rothschild (1974), "A Two Armed Bandit Theory of Market Pricing," *Journal of Economic Theory* 9.

6. Repeated Games with Private Monitoring

- * V. Bhaskar and I. Obara (2002), "Belief-based Equilibria in the Prisoner's Dilemma with Private Monitoring," *Journal of Economic Theory* 102.
- * J. Ely and J. Valimaki (2002), "A Robust Folk Theorem for the Prisoner's Dilemma," *Journal of Economic Theory* 102.
- ** M. Kandori (2002), "Introduction to Repeated Games with Private Monitoring," *Journal of Economic Theory* 102.
- * M. Kandori and H. Matsushima (2000), "Private Observation, Communication and Collusion," *Econometrica* 66.

7. Reputation

- J. Ely and J. Valimaki (2002), "Bad Reputation," forthcoming in *Quarterly Journal of Economics* (forthcoming).
- D. Fudenberg and D. Levine (1989), "Reputation and Equilibrium Selection in Games with a Patient Player," *Econometrica* 57.