Econ 207B Spring 2001 Chris Shannon

## Monotone methods for comparative statics and equilibrium analysis

## • Basics

- \*Milgrom and Roberts, "Rationalizability, Learning and Equilibrium in Games with Strategic Complementarities," *Econometrica*, 58(6), November 1990, 1255-1277.
- 2. \*Milgrom and Shannon, "Monotone Comparative Statics," *Econometrica*, 62(1), January 1994, 157-180.
- 3. \*Topkis, "Minimizing a Submodular Function on a Lattice," Operations Research, 26, 305-321.
- More Methods
  - 1. Shannon, "Weak and Strong Monotone Comparative Statics," *Economic Theory*, 5, 209-227.
  - 2. Edlin and Shannon, "Strict Monotonicity in Comparative Statics," *JET*, 81(1), July 1998, pp. 201-219.
  - 3. \*Athey, "Monotone Comparative Statics Under Uncertainty," MIT working paper 96-22, available at http://web.mit.edu/athey/www/CSU0900.pdf
  - 4. Milgrom and Roberts, "Comparing Equilibria," American Economic Review, 84(3), 441-459.
  - 5. Hopenhayn and Prescott, "Stochastic Monotonicity and Stationary Distributions for Dynamic Economies," *Econometrica*, 60 (2), November 1992, 1387-1406.
  - 6. Echenique, "Comparative Statics by Adaptive Dynamics and the Correspondence Principle," working paper, July 2000.
- Some applications
  - 1. Milgrom and Roberts, "The Economics of Modern Manufacturing" American Economic Review, 80 (3), 51-528.
  - 2. Athey, "Single Crossing Properties and the Existence of Pure Strategy Equilibria in Games of Incomplete Information," working paper, Feb. 1997, available at http://web.mit.edu/athey/www/scpexist.pdf.
  - 3. Persico, "Information Acquisition in Auctions," Econometrica, January 2000, 68(1), pp. 135-48.
  - 4. Bergemann and Valimaki, "Information Acquisition and Efficient Mechanism Design" available at http://cowles.econ.yale.edu/P/cd/d12a/d1248.pdf

- 5. Athey and Levin, "The Value of Information in Monotone Decision Problems," available at http://web.mit.edu/athey/www/VOI.pdf
- 6. Segal, "Contracting with Externalities," QJE, 114(2), pp. 337-388, 1999
- 7. Morris and Shin, "Global Games: Theory and Applications" available at http://www.econ.yale.edu/ sm326/seattle.pdf
- Other related work
  - 1. Milgrom, "Comparing Optima," Journal of Political Economy, 102(3), 607-15.
  - 2. Milgrom and Roberts, "Adaptive and Sophisticated Learning in Repeated Normal Form Games," *Games and Economic Behavior*, 1991, 82-100.
  - 3. Vives, "Nash Equilibrium with Strategic Complementarities," Journal of Mathematical Economics, 19, 305-21.
  - 4. Bulow, Geanakoplos, and Klemperer, "Multimarket oligopoly: strategic substitutes and complements," *Journal of Political Economy*, 93, 488-511.
  - 5. Topkis, "Equilibrium points in nonzero-sum *n* person supermodular games," SIAM Journal of Control and Optimization, 17, 773-787.
  - 6. Topkis, Supermodularity and Complementarity, Princeton University Press.
  - 7. Cooper, Coordination Games: Complementarities and Macroeconomics, Cambridge University Press.
  - 8. Athey Milgrom Roberts, *Robust Comparative Statics*, draft manuscript (not publicly available currently).