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**PSC 508**

**Estimating Games & Testing Formal Models**

Spring 2009

Wed, 12:30-3:15

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Office Hours: By Appointment

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**PURPOSE:** Scholars of political science, economics, and business are increasingly interested in the empirical analysis of and/or “testing” of formal

## **1. Models, Empirical Analysis, and Epistemology**

### **1.1 Formal Models: What Are They? Why Do We Use Them?**

Von Neumann, John and Oskar Morgenstern. 1972. *Theory of Games and Economic Behavior*. Chapter 1.

Kreps, David M. 1990. *A Course in Microeconomic Theory*. Chapter 1.

RBM. Chapters 1-3.

Walt, Stephen M. 1999. "Rigor or Rigor Mortis? Rational Choice and Security Studies." *International Security* 23(4): 548. Read all responses and Walt's reply.

Roger Myerson. 2001. "On the Value of Game Theory in Social Science." *Rationality and Society* 4(1): 62-73.

### **1.2 History, Illustration, and Analytic Narratives**

Robert H. Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry R. Weingast. 1998. *Analytic Narratives*. Princeton, NJ: Princeton University Press.

- Intro, Greif, Weingast

Carpenter, Daniel. 2000. "Commentary: What Is the Marginal Value of Analytic Narratives?" *Social Science History* 24(4): 653-667.

Skocpol, Theda. 2000. "Commentary: Theory Tackles History." *Social Science History* 24(4): 669-676.

Parikh, Sunita. 2000. "Commentary: The Strategic Value of Analytic Narratives." *Social Science History* 24(4): 677-684.

Robert H. Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry R. Weingast. 2000. "Analytic Narratives Revisited." *Social Science History* 24(4): 685-696.

### **1.3 What Exactly Are We Doing? Empirically Evaluating? Analyzing? Testing? Models**

Fogel, Robert W. 1966. "A New Economic History," reprinted in Fritz Stern, ed. 1973. *The*

Clinton, Joshua and Adam Meirowitz. 2003. "Integrating Voting Theory and Roll Call Analysis." *Political Analysis*. 11:381-396.

Clinton, Joshua, Simon Jackman, and Douglas Rivers. 2004. "The Statistical Analysis of Roll Call Data." *American Political Science Review* 98:355-370.



Aradillas-Lopez, Andres. 2008. "Semiparametric Estimation of a Simultaneous Game with Incomplete Information." Working paper.

## 8. Auctions

- Laffont, J.-J., H. Ossard, and Q. Vuong. 1995. "Econometrics of First-Price Auctions," *Econometrica*, 63, 953—980.
- Laffont, J.-J., and Q. Vuong. 1996. "Structural Analysis of Auction Data," *American Economic Review, Papers and Proceedings*, 86, 414—420.
- Laffont, J.-J. 1997. "Game Theory and Empirical Economics: The Case of Auction Data," *European Economic Review*, 41, 1—35.
- Porter, R. 1995. "The Role of Information in U.S. Offshore Oil and Gas Lease Auctions," *Econometrica* 63(1): 1-27.
- Guerre, E., I. M. Perrigne, and Q. Vuong. 2000. "Optimal Nonparametric Estimation of First-Price Auctions," *Econometrica*, 68, 525—574.
- Li, T., I Perrigne, and Quang Vuong. 2002. "Structural Estimation of the Affiliated Private Value Auction Model." *RAND Journal of Economics*. 33:171-193.
- Athey, S. and J. Levin. 2001. "Information and Competition in U.S. Forest Service Timber Auctions." *Journal of Political Economy* 109(2): 375-417.
- Hendricks, K., Pinkse, J. and Porter, R. 2003. "Empirical Implications of Equilibrium Bidding in First Price Common Value Auctions." *Review of Economic Studies* 70-1, 242, pp. 115-146.
- Hong, H. and Shum, M. "Increasing Competition and the Winner's Curse: Evidence from Procurement." *Review of Economic Studies* 69(4), pp 871-898.
- Bajari, Patrick, and Ali Hortacsu. 2005. "Are Structural Estimates of Auction Models Reasonable? Evidence from Experimental Data." *Journal of Political Economy* 113(4): 703-741.
- Athey, Susan and Philip A. Haile. 2007. "Nonparametric Approaches to Auctions." in J. Heckman and E. Leamer, eds, *Handbook of Econometrics*, Vol 6A. Elsevier. Ch 60. Pp3847-3965.
- Hendricks, K. and R. H. Porter. Forthcoming. "An Empirical Perspective on Auctions." in *Handbook of Industrial Organization*

### 9.3 Government Formation

Merlo, Antonio. 1997. "Bargaining over Government in a Stochastic Environment." *Journal of Political Economy* 105:101-131.

Daniel Diermeier, Hulya Eraslan, and Antonio Merlo. 2003. "A Structural Model of Government Formation." *Econometrica* 71(1): 27-70.

### 9.4 Multiple Agents

R. Ericson and A. Pakes. 1995. "Markov-Perfect Industry Dynamics: A Framework for Empirical Work." *Review of Economic Studies* 62: 5382.

Berry, S., S. Levinson, and A. Pakes. 1995. "Automobile Prices in Market Equilibrium." *Econometrica* 63:841-890.

V. Aguirregabiria and P. Mira. 2002. "Swapping the Nested Fixed Point Algorithm: A Class of Estimators for Discrete Markov Decision Models." *Econometrica* 70: 1519-1543.

Ryan, S. 2005. "The Costs of Environmental Regulation in a Concentrated Industry." Working paper.

V. Aguirregabiria and P. Mira. 2007. "Sequential Estimation of Dynamic Discrete Games." *Econometrica* 75: 153.

Bajari, P. Benkard, C.L. and Levin, J.D. 2007. "Estimating Dynamic Games of Imperfect Competition." *Econometrica* 75: 1331-1370.

Jofre-Bonet, M. and Pesendorfer, M. "Estimation of a Dynamic Auction Game." *Econometrica*, forthcoming.

## 10. Multiple Equilibria

Jovanovic, B. 1989. "Observable Implications of Models with Multiple Equilibria." *Econometrica*. 57(6):1431-1437.

Tamer, E. T. 2003. "Incomplete Bivariate Discrete Response Model with Multiple Equilibria." *Review of Economic Studies* 70: 147-167.

Cooper, Russell W. 2005 "Estimation and Identification of Structural Parameters in the Presence of Multiple Equilibria." *Journal of Econometrics* 126: 1-28.

## 12. American Politics

- Mebane, Walter R. Jr. 2000. "Coordination, Moderation and Institutional Balancing in American Presidential and House Elections." *American Political Science Review* 94.
- Groseclose, Tim, and Nolan McCarty. 2001. "The Politics of Blame: Bargaining Before an Audience." *American Journal of Political Science* 45:100-119.
- Canes-Wrone, Brandice, Michael C. Herron, and Kenneth W. Shotts. 2001. "Leadership and Pandering: A Theory of Executive Policymaking." *American Journal of Political Science* 45:532-550.
- Canes-Wrone, Brandice, and Kenneth W. Shotts. 2004. "The Conditional Nature of Presidential Responsiveness to Public Opinion." *American Journal of Political Science* 48:690-706.
- Daniel Diermeier, Michael Keane, and Antonio Merlo. 2005. "A Political Economy Model of Congressional Careers." *American Economic Review* 95(1): 347-373.
- Gordon, Sanford C., and Catherine Hafer. 2005. "Flexing Muscle: Corporate Political Expenditures as Signals to the Bureaucracy." *American Political Science Review* 99: 245-261.
- Krehbiel, Keith. 2007. "Supreme Court Appointments as a Move-the-Median Game." *American Journal of Political Science* 51:231-240.
- Clinton, Joshua. 2007. "Lawmaking and Roll Calls." *The Journal of Politics*. 69(2):457-469.
- Patty, JohnW. 2008. "Equilibrium Party Government." *American Journal of Political Science* 52:636-655.
- Primo, David M., Sarah A. Binder, and Forrest Maltzman. 2008. "Who Consents? Competing Pivots in Federal Judicial Selection." *American Journal of Political Science* 52:471-489.

## 13. International Relations

TBD

*Work on Paper & Presentation: No Class, 4/22*

*Project Presentation: Last Class, 4/29*

*Paper Due: End of Reading Period, 5/3*