Econ 206: Decisions

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Econ 304

Monday 4:00-7:00

This course is on economic decision making and the empirical content of economic models. The approach will be to understand when choice behavior is *consistent* with some economic model of decision making.

Topics covered will include classical and modern choice theory, as well as the theory of decisions (the theory of behavior under uncertainty). Other topics include the empirical content of classical behavioral models (say, the work extending Afriat). The focus here is on understanding what we can say with a given model and observable primitives (usually some form of choice). Many (difficult) open questions exist on the empirical content of classical models of decision and game theory. My plan is to distribute a set of notes (co-authored with Federico Echenique) on the subject.

Below is a partial list of readings. I obviously don't plan to cover these all. Grades will be based on attendance and in-class presentations.

1   Uncertainty

Useful books

L.J. Savage. *The foundations of statistics*. Dover Pubns, 1972

D.M. Kreps. *Notes on the Theory of Choice*. Perseus Books, 1988

I. Gilboa. *Theory of decision under uncertainty*. Cambridge University Press, 2009

Subjective probability and a few generalizations

F.J. Anscombe and R.J. Aumann. A definition of subjective probability. *Annals of mathematical statistics*, pages 199–205, 1963

I. Gilboa and D. Schmeidler. Maxmin expected utility with non-unique prior. *Journal of Mathematical Economics*, 1989

D. Schmeidler. Subjective probability and expected utility without additivity. *Econometrica: Journal of the Econometric Society*, pages 571–587, 1989

P. Klibanoff, M. Marinacci, and S. Mukerji. A smooth model of decision making under ambiguity. *Econometrica*, 73(6):1849–1892, 2005

F. Maccheroni, M. Marinacci, and A. Rustichini. Ambiguity aversion, robustness, and the variational representation of preferences. *Econometrica*, 74(6):1447–1498, 2006

S. Cerreia-Vioglio, F. Maccheroni, M. Marinacci, and L. Montrucchio. Uncertainty averse preferences. working paper., 2008

H. Ergin and F. Gul. A theory of subjective compound lotteries. *Journal of Economic Theory*, 144(3):899–929, 2009

K. Seo. Ambiguity and second-order belief. *Econometrica*, 77(5):1575–1605, 2009

M.J. Machina. Risk, ambiguity, and the rank-dependence axioms. *The American Economic Review*, 99(1):385–392, 2009

Menus

D.M. Kreps. A representation theorem for "preference for flexibility". *Econometrica: Journal of the Econometric Society*, 47(3):565–577, 1979

E. Dekel, B.L. Lipman, and A. Rustichini. Representing preferences with a unique subjective state space. *Econometrica*, 69(4):891–934, 2001

E. Dekel, B.L. Lipman, A. Rustichini, and T. Sarver. Representing Preferences with a Unique Subjective State Space: Corrigendum. *Econometrica*, 75(2):591, 2007

F. Gul and W. Pesendorfer. Temptation and self-control. *Econometrica*, 69(6):1403–1435, 2001

2 Revealed preference

Classical and neoclassical choice theory

H. Moulin. Choice functions over a finite set: a summary. *Social Choice and Welfare*, 2(2):147–160, 1985

Marcel K. Richter. Revealed preference theory. *Econometrica*, 34(3):635–645, jul 1966

Marcel K. Richter. Rational choice. In John S. Chipman, Leonid Hurwicz, Marcel K. Richter, and Hugo F. Sonnenschein, editors, *Preferences, Utility and Demand*, pages 29–58. Harcourt Brace Jovanivic Inc., 1971

K. Suzumura. Rational choice and revealed preference. *The Review of Economic Studies*, 43(1):149–158, 1976

Y. Masatlioglu and E.A. Ok. Rational choice with status quo bias. *Journal of Economic Theory*, 121(1):1–29, 2005

P. Manzini and M. Mariotti. Sequentially rationalizable choice. *American Economic Review*, 97(5):1824–1839, 2007

C.J. Tyson. Cognitive constraints, contraction consistency, and the satisficing criterion. *Journal of Economic Theory*, 138(1):51–70, 2008

Y. Masatlioglu, D. Nakajima, and E.Y. Ozbay. Revealed attention. Mimeo, Michigan U., 2008

Jerry R. Green and Daniel Hojman. Choice, rationality, and welfare measurement. working paper, 2008

Attila Ambrus and Kareen Rozen. Revealed conflicting preferences. working paper, 2008

Geoffroy DeClippel and Kfir Eliaz. Reason-Based Choice: A Bargaining Rationale for the Attraction and Compromise Effects. *Theoretical Economics*, 2010

Economic models of individual choice

R.H. Strotz. The empirical implications of a utility tree. *Econometrica: Journal of the Econometric Society*, 25(2):269–280, 1957

Hugh Rose. Consistency of preference: The two-commodity case. *The Review of Economic Studies*, 25(2):124–125, 1958

S.N. Afriat. The construction of utility functions from expenditure data. *International Economic Review*, 8(1):67–77, feb 1967

Hal R. Varian. The nonparametric approach to demand analysis. *Econometrica*, 50(4):945–974, jul 1982

Hal R. Varian. Non-parametric tests of consumer behaviour. *Review of Economic Studies*, 50(1):99–110, jan 1983

Hal R. Varian. The nonparametric approach to production analysis. *Econometrica*, 52(3):579–598, may 1984

Rosa L. Matzkin. Axioms of revealed preference for nonlinear choice sets. *Econometrica*, 59(6):1779–1786, November 1991

Pierre-Andre Chiappori and Jean-Charles Rochet. Revealed preferences and differentiable demand. *Econometrica*, 55(3):687–691, May 1987

J.C. Rochet. A necessary and sufficient condition for rationalizability in a quasi-linear context. *Journal of Mathematical Economics*, 16(2):191–200, 1987

Donald J. Brown and Caterina Calsamiglia. The nonparametric approach to applied welfare analysis. *Economic Theory*, 31(1):183–188, April 2007

F. Forges and E. Minelli. Afriat's theorem for general budget sets. *Journal of Economic Theory*, 144(1):135–145, 2009

F. Forges. Afriat's theorem for general budget sets: implications on the revelation of budget sets. unpublished, 2010

Ana Fostel, Herbert Scarf, and Michael Todd. Two new proofs of afriat's theorem. *Economic Theory*, 24(1):211–219, 2004

F. Kubler. Is intertemporal choice theory testable? *Journal of Mathematical Economics*, 40(1-2):177–189, 2004

A. Bogomolnaia and J.F. Laslier. Euclidean preferences. *Journal of Mathematical Economics*, 43(2):87–98, 2007

Marcel K. Richter and Kam-Chau Wong. Concave utility on finite sets. *Journal of Economic Theory*, 115(2):341–357, April 2004

Models of group choice
David C. McGarvey. A theorem on the construction of voting paradoxes. *Econometrica*, 21(4):608–610, 1953

John O. Ledyard. The scope of the hypothesis of bayesian equilibrium. *Journal of Economic Theory*, 39(1):59–2, June 1986

Donald J. Brown and Rosa L. Matzkin. Testable restrictions on the equilibrium manifold. *Econometrica*, 64(6):1249–1262, November 1996

D.J. Brown and C. Shannon. Uniqueness, stability, and comparative statics in rationalizable Walrasian markets. *Econometrica*, 68:1529–1539, 2000

B. Peleg and S. Tijs. The consistency principle for games in strategic form. *International Journal of Game Theory*, 25(1):13–34, 1996

W. Gaertner and Y. Xu. On rationalizability of choice functions: A characterization of the median. *Social Choice and Welfare*, 16(4):629–638, 1999

Yves Sprumont. On the testable implications of collective choice theories. *Journal of Economic Theory*, 93:205–232, 2000

Yves Sprumont. Paretian quasi-orders: The regular two-agent case. *Journal of Economic Theory*, 101(2):437 – 456, 2001

Y. Xu and L. Zhou. Rationalizability of choice functions by game trees. *Journal of Economic Theory*, 134(1):548–556, 2007

P.A. Haile, A. Hortaçsu, and G. Kosenok. On the empirical content of quantal response equilibrium. *The American Economic Review*, 98(1):180–200, 2008

A. Degan and A. Merlo. Do voters vote ideologically? *Journal of Economic Theory*, 144(5):1868–1894, 2009

A. Carvajal. The testable implications of competitive equilibrium in economies with externalities. *Economic Theory*, pages 1–30, 2009

T. Kalandrakis. Rationalizable voting. *Theoretical Economics*, 5(1):93–125, 2010

A. Galambos. The complexity of Nash rationalizability. unpublished, 2009

SangMok Lee. The testable implications of zero sum games. 2009. unpublished

John Quah and Antonio Carvajal. A nonparametric analysis of the cournot model. unpublished, 2010

R. Deb and J. Fenske. A nonparametric test of optimal behavior in the Cournot model. unpublished, 2010

Models of uncertainty

Peter C. Fishburn. The theorem of the alternative in social choice theory. *Operations Research*, 19(6), October 1971

Peter Fishburn. Separation theorems and expected utilities. *Journal of Economic Theory*, 11:16–34, 1974

M.K. Richter. Rational choice and polynomial measurement models. *Journal of Mathematical Psychology*, 12(1):99–113, 1975

T. Kim. The subjective expected utility hypothesis and revealed preference. *Economic Theory*, 1(1):251–263, 1991

K.C. Border. Revealed preference, stochastic dominance, and the expected utility hypothesis. *Journal of Economic Theory*, 56(1):20–42, 1992

E. Zambrano. Testable implications of subjective expected utility theory. *Games and Economic Behavior*, 53(2):262–268, 2005

P.A. Chiappori, B. Jullien, B. Salanie, and F. Salanie. Asymmetric information in insurance: General testable implications. *Rand Journal of Economics*, pages 783–798, 2006

Stochastic choice

R.D. Luce. *Individual choice behavior: A theoretical analysis*. John Wiley, 1959

Gerard Debreu. Review of individual choice behavior: A theoretical analysis, 1960

H.D. Block and J. Marschak. *Random orderings and stochastic theories of responses*. Cowles Foundation, 1960

J.C. Falmagne. A representation theorem for finite random scale systems* 1. *Journal of Mathematical Psychology*, 18(1):52–72, 1978

S. Barbera and P.K. Pattanaik. Falmagne and the rationalizability of stochastic choices in terms of random orderings. *Econometrica*, pages 707–715, 1986

F. Gul and W. Pesendorfer. Random expected utility. *Econometrica*, 74(1):121–146, 2006

Faruk Gul, Paulo Natenzon, and Wolfgang Pesendorfer. Random choice as behavioral optimization. working paper, 2010