

Applications of Psychology and Economics – Econ 219B
Spring 2007
Wednesday 12-3, 639 Evans Hall

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Office Hours:

Syllabus

Features of this course

This course is the continuation of the 219A class in *Psychology and Economics – Theory*, taught by Mathew Rabin. As in 219A, we will keep emphasizing the psychological evidence as the basis for sound economic analysis. This should surprise nobody, given the name by which the course (and the field) goes. We will also insist on the importance of neoclassical theory as a very successful benchmark that you are required to know. Finally, several topics of this course are designed to be the empirical counterpart of the theory covered in 219A. This is in particular true for the sections on Present Bias, Reference Dependent Preferences, and Social Preferences.

There are two main differences between 219A and 219B. First, this class has largely an empirical orientation, as opposed to the theoretical orientation of 219B. The emphasis on data just reflects the empirical status of economics. In particular, the success of the Psychology and Economics approach will depend on the empirical explanatory power of its theories. Can this approach explain evidence that the neoclassical model struggles with? Can it do so using parsimonious models? In 219B I will present empirical papers drawn from a variety of fields to try to address these questions. We will study papers in the fields of asset pricing, consumption, development economics, environmental economics, industrial organization, labor economics, political economy, public economics, and corporate finance.

The second main feature of the course will be its emphasis on dissertation writing. This will be apparent in the exposition of the topics. More often than not, we will note that the available empirical evidence barely scratches the surface. While this is a drawback for the field, it is a great opportunity for students planning to work in the area. In very few other fields there are so many important questions that still go unanswered. Throughout the course I will do my best to point out what seem to me like good directions for empirical research. In addition, as an incentive to get you started, one of the requirements of the course is a paper on an applied topic using field data.

Rules of the game

As a general rule, you should have taken the 219A course before you take this course. If you have not, but are interested in taking this course, please come and talk to me. The prerequisites of the 219A course, that is, an understanding of the economics of uncertainty and game theory at the level of 201B, apply to this course as well. In addition, it is important that you have had exposure to econometrics and empirical research. You should be familiar with OLS estimation, panel data models, and discrete choice models. For example, you should have no uncertainty as to what fixed effects do in a regression. Although it is not a requirement for this course, I recommend taking at least one labor economics, public economics, or applied econometrics course to anyone contemplating doing empirical research.

Throughout the course, I will assign a few required readings each week. The required readings are starred in the reading list below. The non-starred readings are optional, but I suggest that you at least read the abstract. So much of a paper is in the abstract (if the abstract is well-written).

There are four requirements for the course: three problem sets, a final exam, an empirical problem set, and an empirical paper. The last two requirements are either/or, that is, you can do either the empirical problem set or the paper. (Notice: The requirements have changed from the last time the class was taught, in Spring 2005)

I encourage everyone to try to write an empirical paper on a Psychology and Economics topic. This will help you to get started on your research, which is the real purpose of taking a PhD (as opposed to doing class-work). The paper can be written with up to two other students in the class. I encourage every one that is thinking about writing the paper to come and see me by February 18. You should feel free to either come during office hours or to schedule an appointment via email. A two-page written proposal is due by March 17. The final 10-15 page paper is due on May 20. The ideal paper contains a novel idea, the empirical strategy, and preliminary empirical results. However, I will accept significantly less as long as you show significant effort. Two things are key: (i) that you do at least some preliminary analysis with data, since one purpose of the requirement is to make sure that you learn to use Stata or another statistical package; (ii) that you use field data, as opposed to experimental data. (This is by no means meant as a negative on doing lab experiments. Laboratory experiments are great. However, this class focuses on field data) Replication of existing studies is perfectly fine, and encouraged. Replication, in fact, is a good way to start original research, and more and more replication data sets are available on the AER and JPE websites. Some of the papers prepared for this class in past year have turned into publishable papers and, in one case, even into a job market paper. I encourage you therefore to think of presenting the paper that comes out of this class in the Psychology and Economics Lunch.

In any case, you are strongly encouraged to attend the Psychology and Economics lunch (meeting most Fridays 1.30-2.30) if you are interested in making Psychology and Economics one of your fields. In addition, you should attend the Psychology and Economics Seminar (Tu 2-4) as much as you can. Spots to go for lunch with outside speakers are available for sign-up.

The alternative assignment is a one-time, significant empirical problem set that is meant to familiarize you with empirical research in Psychology and Economics. This year, the problem set will focus on earning announcements and the response of stock prices to the new information contained in the announcements. We may also have, in alternative, another empirical problem set on the effect of the media. You can work on the assignment in groups of up to three people, but

each one should hand in a solution. I will distribute the problem set at the beginning of March. The data will be in Stata format. I will assume that you have a working knowledge of Stata.

As for the other two requirements, the three problem sets will test your knowledge of modelling and of empirical specifications in some of the papers we cover. The problem sets this year will be on Present-Biased Preferences, on Reference Dependence, and on Menu Effects.

Finally, the exam will cover the material of the whole class and will be modeled on the type of questions that I ask in the problem sets.

The course webpage is an important instrument for this course (http://emlab.berkeley.edu/users/webfac/dellavigna/e219b_sp07/e219b_07.shtml is the address of this year's). On the website you will find updated lists of readings, the assignments, and the revised lecture notes in pdf format.

After class, I invite you to join me to chat about any favorite topic of yours in the Peixotto room during tea time.

Grading

The final grade will be an average with weight 30% on the three problem sets, 40% on the final (in-class) exam, and the remaining 30% on either the paper or empirical problem set.

Tentative schedule of classes

The schedule will vary somewhat as the class unfolds. The syllabus will be updated on the web and will be available on the course webpage at http://emlab.berkeley.edu/users/webfac/dellavigna/e219b_sp07/e219b_07.shtml. (the course webpage)

Part I -- Non-Standard Preferences

January 17 – Lecture 1

- Introduction
- Psychology and Economics: The Methodology
- Psychology and Economics: The Fields
- Present-Biased Preferences, Part 1
- Problem Set 1 assigned

January 24 – No Lecture

January 31 – Lecture 2

- Present-Biased Preferences, Part 2
- Status-Quo in Financial Decisions
- Problem Set 1 due

February 7 – Lecture 3

- Behavioral Economics and Economic Demography – Special Session with Daniel Kahneman and Ronald Lee
- Present-Biased Preferences, Part 3
- Consumption Choices

February 14 – Lecture 4

- Present-Biased Preferences, Part 4
- Reference Dependence, Part 1
- Effect of Experience
- Problem Set 2 assigned

February 21 – Lecture 5

- Reference Dependence, Part 2
- Daily Labor Supply
- Risk Aversion
- Problem Set 2 due

February 28 – Lecture 6

- Reference Dependence, Part 3

Financial Decisions
Effort on the Job
Social Preferences, Part 1
Charitable Giving Overview

Part II -- Non-Standard Information Processing

March 7 –Lecture 7

Social Preferences, Part 2 (from Non-Standard Preferences Section)
Field Evidence of Gift Exchange
Limited Attention, Part 1
eBay Auctions
Problem Set 3 assigned

March 14 – No Lecture

March 21 – Lecture 8

Limited Attention, Part 2
Financial Market Evidence
Voter Behavior
Menu Effects
1/n Heuristic
Use of Irrelevant Information
Problem Set 3 due

March 23 – 2-page Paper proposals due

March 28 – Spring Break – No Lecture

April 4 – Lecture 9

Menu Effects
Choice Overload
Social Pressure
Persuasion

Part III -- Non-Standard Beliefs

April 11 – Lecture 10

Overoptimism
Overconfidence
Projection Bias

Part IV – Market Response to Biases

April 18 – Lecture 11

Market Reaction to Biases, Part 1
Introduction to Behavioral Asset Pricing
Limits to Arbitrage
Behavioral IO

April 25 – Lecture 12

Market Reaction to Biases, Part 2
 Behavioral Corporate Finance
 Behavioral Political Economy
 Behavioral Welfare Economics
Empirical Methodologies in Psychology and Economics
Choosing Topics for Dissertation
Conclusion
Empirical Problem Set Handed Out (Earnings Announcement)

May 2 – Final (in-class) Exam

May 20 (midnight) – Due date for Paper and Empirical Problem Set

Readings

*designates required readings.

Some of the readings will be taken from the textbook used in the previous semester of 219A, that is, from *Choice, Values and Frames*:

Kahneman and Tversky *Choices, values and frames*, (henceforth CVF).

The following paper in preparation for the *Journal of Economic Literature* will cover, in a dense manner, the topics covered in the class. It is still a preliminary version:

* DellaVigna, Stefano, "Psychology and Economics: Evidence from the Field", mimeo, 2006.

For those of you who are looking for a background book in social psychology to complement the content of the Psychology and Economics sequence, I recommend:

L. Ross and R.E. Nisbett, *The Person and the Situation*, McGraw-Hill, 1991.

Part I -- Non-Standard Preferences

January 17 – Lecture 1

Six Examples of Psychology and Economics

* Sydnor, Justin. 2006. "Sweating the Small Stuff: The Demand for Low Deductibles in Homeowner's Insurance." Working paper.

* Gneezy, Uri, and John List. 2006. "Putting Behavioral Economics To Work: Testing For Gift Exchange In Labor Markets Using Field Experiments", *Econometrica*, Vol. 74(5), pp. 1365--1384.

* Huberman, Gur, and Tomer Regev. 2001. "Contagious Speculation and a Cure for Cancer: A Nonevent that Made Stock Prices Soar." *Journal of Finance*, 56(1): 387-396.

* Iyengar, Sheena S., Gur Huberman, and Wei Jiang. 2004. "How Much Choice Is Too Much? Contributions to 401(k) Retirement Plans," in *Pension Design and Structure: New Lessons from Behavioral Finance*, ed. by O. S. Mitchell, and S. P. Utkus, chap. 5. Oxford University Press.

* Conlin, Michael, Ted O'Donoghue, and Timothy J. Vogelsang. 2006. "Projection Bias in Catalog Orders." Working paper.

* DellaVigna, Stefano and Ulrike Malmendier. 2004. "Contract Design and Self-Control: Theory and Evidence." *Quarterly Journal of Economics*, 119: 353-402.

Present-Biased Preferences: Status-Quo Bias in Financial Decisions I

* Madrian, Brigitte C. and Dennis F. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *Quarterly Journal of Economics*, 116(4): 1149-1187.

Choi, James J., David Laibson, Brigitte C. Madrian and Andrew Metrick. 2004. "For Better or For Worse: Default Effects and 401(k) Savings Behavior," in David Wise editor Perspectives in the Economics of Aging. Chicago, IL: University of Chicago Press, 2004, 81-121.

January 24 – No Lecture

January 31 – Lecture 2

Present-Biased Preferences: Status-Quo Bias in Financial Decisions II

* O'Donoghue, Ted and Matthew Rabin. 2001. "Choice and Procrastination," *Quarterly Journal of Economics*, 121-160.

O'Donoghue, Ted and Matthew Rabin. 1999 "Doing It Now or Later," *American Economic Review*, 89(1), 103-124.

Ted O'Donoghue and Matthew Rabin. "Procrastination in Preparing for Retirement", in *Behavioral Dimensions of Retirement Economics*, Henry Aaron, editor, The Brookings Institution, 1999.

* Choi, James J. and David Laibson and Brigitte Madrian and Andrew Metrick. 2005. "Optimal Defaults and Active Decisions," NBER Working Papers.

Cronqvist, Henrik, and Richard H. Thaler. 2004 "Design Choices in Privatized Social-Security Systems: Learning from the Swedish Experience." *American Economic Review Papers and Proceedings*, Vol. 94(2), pp. 424-428.

Present-Biased Preferences: Consumer Behavior I

* Ariely, Dan and Wertenbroch, Klaus (2002), "Procrastination, Deadlines, and Performance: Self-Control by Precommitment, *Psychological Science*, 13 (May), 219-224

February 7 – Lecture 3

12pm-1pm: Meet at 2232 Piedmont for Brownbag Seminar with Daniele Kahneman on "Behavioral Economics and Demography".

1.10pm-3pm: Meet back in 639 Evans

Present-Biased Preferences: Consumer Behavior II

* DellaVigna, Stefano and Malmendier, Ulrike. "Paying Not To Go To The Gym", *American Economic Review*, June 2006.

* Ausubel, Lawrence. "Adverse Selection in the Credit Card Market", Working Paper, University of Maryland, June 1999.

Shui, Haiyan, and Ausubel, Lawrence. "Time Inconsistency in the Credit Card Market", mimeo.

Present-Biased Preferences: Life-Cycle Consumption and Savings Decisions

* David Laibson, Andrea Repetto and Jeremy Tobacman, "Estimating Discount Functions from Lifecycle Consumption Choices" January 26, 2004.

Laibson, D. "Golden eggs and hyperbolic discounting", *Quarterly Journal Of Economics*, Vol. 112 n2, May 1997, p.443-77.

Angeletos, George-Marios, David Laibson, Jeremy Tobacman, and Stephen Weinberg. 2001. "The Hyperbolic Consumption Model: Calibration, Simulation, and Empirical Evaluation." *Journal of Economic Perspectives*, 15(3).

Additional Readings on Present-Biased Preferences

Experimental and Neural Evidence

Frederick, Shane, George Loewenstein, and Ted O'Donoghue. 2002. "Time discounting and time preference: a critical review." *Journal of Economic Literature*, 40: 351-401.

Loewenstein, George and David Prelec. 1992. "Anomalies in Intertemporal Choice: Evidence and an Interpretation." *Quarterly Journal of Economics*, 107(2): 573-597.

Samuel M. McClure, David Laibson, George Loewenstein and Jonathan D. Cohen) Separate Neural Systems Value Immediate and Delayed Monetary Rewards. *Science* 306, October 15 2004

Mischel, W., Y. Shoda, and M.L. Rodriguez (1992). "Delay of gratification in children" in "Choice over Time", Elster and Loewenstein ed., Russell Sage Foundation.

Consumer Behavior

Wertenbroch, Klaus, "Consumption Self-Control by Rationing Purchase Quantities of Virtue and Vice," *Marketing Science*, 17 (4), 317-337

Miravete, Eugenio 2003. "Choosing the Wrong Calling Plan? Ignorance and Learning" *American Economic Review*, 93, pp. 297-310.

Edward L. Glaeser, David M. Cutler and Jesse M. Shapiro "Why Have Americans Become More Obese?", *Journal of Economic Perspectives*, Summer 2003.

Samuelson, William and Zeckhauser, Richard, "Status-Quo Bias". *Journal of Risk and Uncertainty*, 1988.

Payday effect

Shapiro, Jesse. "Is there a daily discount rate? Evidence from the food stamp nutrition cycle" *Journal of Public Economics*, forthcoming.

Melvin Stephens Jr. "'3rd of the month': Do social security recipients smooth consumption between checks?" *American Economic Review*, 93(1):406—422, March 2003.

Barenstein and Huffman "Beer, Steak and Whisky: Evidence of a Payday Spending-Spree"

Duflo and Kremer

Labor Economics

DellaVigna, Stefano and M. Daniele Paserman. 2005. "Job Search and Impatience." *Journal of Labor Economics*, 23(3): 437-466.

Paserman, M. Daniele. 2004. "Job Search and Hyperbolic Discounting: Structural Estimation and Policy Evaluation," IZA Discussion Papers 997, Institute for the Study of Labor (IZA).

Public Economics

Fang, Hanming and Dan Silverman. "On the Compassion of Time-limited Welfare Programs" July 2002, *Journal of Public Economics*.

Fang, Hanming, and Dan Silverman. 2004. "Time-inconsistency and Welfare Program Participation: Evidence from NSLY." Cowles Foundation Discussion Papers No 1465.

Gruber, Jonathan and Koszegi, Botond. "Is Addiction 'Rational?' Theory and Evidence" *Quarterly Journal of Economics*, 2001, 116(4), pp. 1261-1305

Becker, Gary S., and Kevin Murphy (1988). "A Theory of Rational Addiction," *Journal of Political Economy*, 96, 675-700.

Gruber, Jonathan and Sendhil Mullainathan. 2005. "Do Cigarette Taxes Make Smokers Happier," *Advances in Economic Analysis & Policy*, Berkeley Electronic Press, 5(1): 1412-1412.

Corporate Finance

Baker, Malcolm, Joshua Coval, and Jeremy Stein. "Corporate Financing Decision When Investors Take the Path of Least Resistance." NBER Working Paper Series, No. w10998, 2004.

February 14 – Lecture 4

Present-Biased Preferences: Life-Cycle Consumption and Savings Decisions II

* Ashraf, Nava, Dean Karlan, and Wesley Yin. 2006. "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines." *Quarterly Journal of Economics* 121, no. 2.

Reference Dependence and the Endowment Effect

Kahneman, Daniel, Jack L. Knetsch, and Richard Thaler. 1990. "Experimental Tests of the Endowment Effect and the Coase Theorem." *Journal of Political Economy*, 98: 1325-48.

* Plott, Charlie R., and Zeiler, Kathryn. 2004 "The Willingness to Pay/Willingness to Accept Gap, the "Endowment Effect," Subject Misconceptions and Experimental Procedures for Eliciting Valuations", *American Economic Review*.

* List, John A. "The Nature and Extent of Discrimination in the Marketplace: Evidence from the Field," *Quarterly Journal of Economics* (2004), 119(1): pp. 49-89.

List, John A. "Neoclassical Theory Versus Prospect Theory: Evidence from the Marketplace," *Econometrica* (2004), 72(2): pp. 615-625.

February 21 – Lecture 5

Reference Dependence and Labor supply

* Camerer, Colin, Babcock, Linda, Loewenstein, George, and Thaler, Richard. "Labor supply of New York City Cabdrivers: One day at a time", 1997, *Quarterly Journal Of Economics*, p.407-42. (CVF 20)

Oettinger, G. 1999 "An empirical analysis of the daily labor supply of stadium vendors", *Journal of Political Economy*, p.360-92.

* Farber, Henry S. "Is Tomorrow Another Day? The Labor Supply of New York City Cab Drivers", *Journal of Political Economy*, 2004.

Farber, Henry S. "Reference-Dependent Preferences and Labor Supply: The Case of New York City Taxi Drivers" December 2004.

* Fehr, Ernst and Goette, Lorenz. "Intertemporal Substitution at Work? Evidence from a Field Experiment", 2002.

Goette, Lorenz and Huffman, David "Reference-Dependent Preferences and the Allocation of Effort Over Time", 2004.

Reference Dependence and Risk Aversion

* Justin Sydnor, "The Deductible-Premium Puzzle: Evidence on Risk Aversion from Deductible Choice in the Homeowners Insurance Market", Berkeley, mimeo, 2005.

Barsky, Robert B., F. T. Juster and M. Kimball, "Preference Parameters and Behavioral Heterogeneity: An Experimental Approach in the Health and Retirement Study," *Quarterly Journal of Economics*, 112(2), May 1997, 537-579.

February 28 – Lecture 6

Reference Dependence and Asset Pricing

* Odean, Terry. "Are Investors Reluctant to Realize Their Losses?", *Journal of Finance*, 1998, p.1775-1798. (CVF 21)

Ivkovich, Zoran, James Poterba and Scott Weisbenner. 2005 "Tax-Motivated Trading by Individual Investors." *American Economic Review*, 95(5): 1605—1630.

* Barberis, Nicholas and Wei Xiong. 2006. "What Drives the Disposition Effect? An Analysis of a Long-Standing Preference-Based Explanation." Working Papers.

Benartzi, S. and Thaler, R. "Myopic loss aversion and the equity premium puzzle", *Quarterly Journal of Economics*, 110, February 1995, pp.73-92. (CVF 17)

Barberis, Huang, and Santos, "Prospect Theory and Asset Prices," *Quarterly Journal of Economics*, 116, 2001, pp.1-53.

Barberis, N. and Huang, M., "Mental Accounting, Loss Aversion, and Individual Stock Returns" *Journal of Finance*, 56, 2001, pp.1247-92.

Reference Dependence and Pay-Setting

* Mas, Alexander. 2006. "Pay, Reference Points, And Police Performance", *Quarterly Journal of Economics*.

Social Preferences: Charitable Giving

* Jim Andreoni, "The Economics of Philanthropy." in N. Smeltser, P. Baltes, eds., *International Encyclopedia of Social and Behavioral Sciences*, Elsevier: Oxford, 2001, 11369-11376.

Additional Readings on Reference Dependence

Markets

Genesove, David and Chris Mayer, "Loss Aversion and Seller Behavior: Evidence from the Housing Market", *Quarterly Journal of Economics*, 2001, Vol. 116, No. 4, 1233-1260.

Heath, C., Huddart, S., and Lang, M., "Psychological factors and stock option exercises", *Quarterly Journal of Economics*, 1999.

Haigh, Michael, and John A. List "Do Professional Traders Exhibit Myopic Loss Aversion? An Experimental Analysis," *Journal of Finance* (2004), forthcoming.

Camerer, Colin. "Prospect theory in the wild: Evidence from the field" (CVF 16)

Time preferences

Loewenstein, G. and N. Sicherman (1991). "Do Workers Prefer Increasing Wage Profiles?" *Journal of Labor Economics* 9(1): 67-84.

Neural evidence

Knutson, B. & Peterson, R. (In Press). Neurally reconstructing expected utility. *Games and Economic Behavior*.

March 7 – Lecture 7

Social Preferences: Gift Exchange in The Field

Fehr, Kirchsteiger, and Riedl. 1993. "Does Fairness Prevent Market Clearing? An Experimental Investigation" *Quarterly Journal of Economics*, 108, pp. 437-459.

Falk, Armin "Charitable Giving as a Gift Exchange - Evidence from a Field Experiment", September 2003.

* Gneezy, Uri, and John List. 2006. "Putting Behavioral Economics To Work: Testing For Gift Exchange In Labor Markets Using Field Experiments", *Econometrica*, Vol. 74(5), pp. 1365--1384.

* List, John. "The Behavioralist Meets the Market: Measuring Social Preferences and Reputation Effects in Actual Transactions", *Journal of Political Economy*.

Limited Attention: eBay Auctions

* Lee, Hanh, and Malmendier, Ulrike. 2006 "The Bidder's Curse", mimeo.

* Hossain, Tanjim and John Morgan. 2006. "...Plus Shipping and Handling: Revenue (Non) Equivalence in Field Experiments on eBay," *Advances in Economic Analysis & Policy*, 6(2): 1429-1429.

Additional Readings on Social Preferences

Akerlof, G. "Labor contracts as partial gift exchange", *Quarterly Journal of Economics*, 1982, p.543-69.

Bewley, T. *Why wages don't fall during a recession*, 1999, Harvard UP, 2000, Chap. 8, 21.

Charness, Gary and Kuhn, Peter. "Do Co-Workers' Wages Matter? Theory and Evidence on Wage Secrecy, Wage Compression and Effort", mimeo, 2004.

Daniel Kahneman and Jack Knetsch, and Richard Thaler, "Fairness as a Constraint on Profit-Seeking: Entitlements in the Market," *American Economic Review*, 1986.

Andreoni, Jim. "Why Free-Ride?", *Journal of Public Economics* 37, 1988, 291-304.

B. Kingma, "An Accurate Measurement of the Crowd-Out Effect, Income Effect, and Price Effect for Charitable Contributions," *Journal of Political Economy* 97 (1989), 1197-1207.

Field experiments

John A. List and David Lucking-Reiley, "The Effects of Seed Money and Refunds on Charitable Giving: Experimental Evidence from a University Capital Campaign." *Journal of Political Economy*, February 2002, vol. 110, no. 8, pp. 215-233.

March 14 – No Lecture

Part II -- Non-Standard Information Processing

March 21 – Lecture 8

Limited Attention: Financial Market Evidence

Huberman, Gur, and Tomer Regev. 2001. "Contagious Speculation and a Cure for Cancer: A Nonevent that Made Stock Prices Soar." *Journal of Finance*, 56(1): 387-396.

* Cohen, Lauren, and Frazzini, Andrea. 2006. "Economic Links and Predictable Returns", mimeo.

DellaVigna, Stefano and Pollet, Josh. 2004 "Attention, Demographic Changes and the Stock Market"

* Barber, Brad and Odean, Terry. "All that Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors", April 2002.

Limited Attention: Consumption Behavior

Chetty, Raj, Looney, Adam, and Kroft, Kory. "Salience and Taxation: Theory and Evidence from a Field Experiment", 2007.

Menu Effects: 1/n Heuristic

* Benartzi, Shlomo and Richard H. Thaler. 2001. "Naive Diversification Strategies in Defined Contribution Saving Plans." *American Economic Review*, 91(1): 79-98.

* Huberman, Gur, and Wei Jiang. 2006. "Choices in 401(k) Plans: Equity Exposure and Number of Funds." *Journal of Finance*, 61(2): 763-801.

Menu Effects: Use of Irrelevant Information

* Ho, Daniel E., and Kosuke Imai. "The Impact of Partisan Electoral Regulation: Ballot Effects from the California Alphabet Lottery, 1978-2002.", 2004.

Additional Readings on Limited Attention

Theory and Experiments

Mullainathan, Sendhil. "Thinking Through Categories", April 2002.

Gabaix, Xavier and David Laibson "Bounded rationality and directed cognition", Mimeo.

Gabaix, Xavier, David Laibson, Guillermo Moloche and Stephen Weinberg. 2006. "Costly Information Acquisition: Experimental Analysis of a Boundedly Rational Model", *American Economic Review*, Vol. 96(4), pp. 1043--1068.

Rubinstein, A. *Modeling bounded rationality*, MIT Press, 1998.

Financial Markets

Michael Rashes. "Massively Confused Investors Making Conspicuously Ignorant Choices (MCI-MCIC)", *Journal of Finance*, October 2001.

Hong, Harrison, Torous, Walter, and Ross Valkanov. "Do Industries Lead the Stock Market? Gradual Diffusion of Information and Cross-Asset Return Predictability," November 2002

Pollet, "Predicting Asset Returns with Expected Oil Price Changes", November 2003.

Barberis, Nick and Shleifer, Andrei. "Style Investing", *Journal of Financial Economics*, 2002.

Voters

Justin Wolfers, "Are Voters Rational? Evidence from Gubernatorial Elections", Stanford GSB.

March 23 – 2-page Paper proposals due

March 28 – Spring Break – No Lecture

April 4 – Lecture 9

Menu Effects: Choice Overload and Other

Iyengar, Sheena S., Gur Huberman, and Wei Jiang. 2004. "How Much Choice Is Too Much? Contributions to 401(k) Retirement Plans," in *Pension Design and Structure: New Lessons from Behavioral Finance*, ed. by O. S. Mitchell, and S. P. Utkus, chap. 5. Oxford University Press.

* Bertrand, Marianne, Dean Karlan, Sendhil Mullainathan, Eldar Shafir, and Jonathan Zinman. 2006. "What's Psychology Worth? A Field Experiment in the Consumer Credit Market." Working paper.

Simonson, Itamar and Tversky, Amos. Choice in Context: Tradeoff Contrast and Extremeness Aversion, *Journal of Marketing Research*, Vol. XXIX, 1992

Social Pressure

Asch, "Opinions and social pressure," *Scientific American*, 193, 1955.

Garicano, Luis, Ignacio Palacios-Huerta, and Canice Prendergast. 2005. "Favoritism Under Social Pressure," *Review of Economics and Statistics*, 87(2): 208-216.

Armin Falk, Andrea Ichino, "Clean Evidence on Peer Pressure", *Journal of Labor Economics*, 2006.

* Mas, Alexander and Moretti, Enrico. "Peers at Work", mimeo, 2006.

Persuasion

* DellaVigna, Stefano and Kaplan, Ethan. 2007. "The Fox News Effect: Media Bias and Voting", *Quarterly Journal of Economics*.

Duflo, Esther and Emmanuel Saez. 2003. "The Role Of Information And Social Interactions In Retirement Plan Decisions: Evidence From A Randomized Experiment." *Quarterly Journal of Economics*, 118(3): 815-842.

Additional Readings on Social Pressure and Persuasion

Model

Akerlof, George. "Procrastination and Obedience", AER 1991, 81(2): 1-19.

DeMarzo, Peter, Vayanos, Dimitry, and Zwiebel, Jeff. "Persuasion Bias, Social Influence, and Uni-Dimensional Opinions", July 2002

Evidence

Madrian, Brigitte C. and Dennis F. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *Quarterly Journal of Economics*, 116(4): 1149-1187.

Hong, Harrison, Stein, Jeremy C. and Jeffrey D. Kubik. "Thy Neighbor's Portfolio: Word-of-Mouth Effects in the Holdings and Trades of Money Managers" , August 2002.

Bernardo A. Huberman, Christoph H. Loch, and Ayse Öncüler "Status as a Valued Resource", mimeo.

Part III -- Non-Standard Beliefs

April 11 – Lecture 10

Overoptimism

Camerer, Colin, and D. Lovo (1999) “Overconfidence and Excess Entry: An Experimental Approach,” *American Economic Review*, 89:1 (March), 306-318.

CVF 23

* Malmendier and Tate, “Who Makes Acquisitions? A Test of the Overconfidence Hypothesis” Manuscript, November, 2004.

Malmendier, Ulrike, and Geoffrey Tate. 2005. “CEO Overconfidence and Corporate Investment.” *Journal of Finance*, 60 (6): 2661-2700.

Overconfidence

* Odean, Terrance. 1999. “Do investors trade too much?” *American Economic Review*, 89: 1279—1298.

Odean, T. "Boys will be Boys: Gender, Overconfidence, and Common Stock Investment" with Brad Barber, *Quarterly Journal of Economics*, February 2001, Vol. 116, No. 1, 261-292.

Projection Bias

* Conlin, Michael, Ted O'Donoghue, and Timothy J. Vogelsang. 2006. "Projection Bias in Catalog Orders." *American Economic Review*, forthcoming.

Part IV -- Market Response to Biases

April 18 – Lecture 11

Market Response to Biases: Behavioral Finance

* Barberis, Nicholas and Richard Thaler. 2003. “A Survey of Behavioral Finance.” *Handbook of the Economics of Finance*.

* DeLong, B. Shleifer, A., Summers, L., and Waldman, R., “Noise trader risk in financial markets”, JPE, v98 n4, Aug 1990, p.703-38. Reprinted in Richard H. Thaler, ed., *Advances in Behavioral Finance*, Russell Sage Foundation, 1993.

Shleifer, Andrei, Summers, Lawrence. “The Noise Trader Approach to Finance”. *Journal of Economic Perspectives*, Spring, 1990.

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