Applications of Psychology and Economics – Econ 219B  
Spring 2013  
Wednesday 12-3, 648 Evans Hall  
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Syllabus

Features of this course

This course is the continuation of the 219A class in *Psychology and Economics – Theory*, taught by Josh Schwartzstein. As in 219A, we will keep emphasizing the psychological evidence as the basis for sound economic analysis. We will also insist on the importance of neoclassical theory as a 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.

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. I will present empirical papers drawn from a variety of fields: asset pricing, consumption, development economics, environmental economics, industrial organization, labor economics, political economy, public economics, and corporate finance. As such, the class is also meant for applied students that do not intend to make Psychology and Economics one of their main fields, but want to apply some of the behavioral ideas to their field of interest.

The second main feature of the course will be its emphasis on dissertation writing. 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.

The 219B course also covers a set of 11 Methodological Topics, including some of the how-to-do list for empirical behavioral research. These include (i) practical topics such as approval from Human Subjects and how to run field experiments, (ii) conceptual issues such as the difference between lab and field experiments and mis-application of present-bias models; and (iii) econometric issues such as clustering of standard errors. These topics are integrated with the other research topics.

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 two to four 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 introduction. So much of a paper is in the introduction (if the introduction is well-written).

There are four requirements for the course: 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.

**Problem Sets.** The problem sets will test your knowledge of modeling and of empirical specifications. The problem sets will be on Present-Biased Preferences, on Reference Dependence, and on Behavioral IO, with a possible fourth one.

**Exam.** The in-class 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.

**Empirical Paper.** 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 of course is the ultimate purpose of taking a PhD. The paper can be written with up to two other students in the class. I encourage everyone to come and see me by March 2. You should schedule an appointment via email. A two-page written proposal is due by April 2. The final 10-15 page paper is due on May 13.

The *ideal* paper contains a novel idea, the empirical strategy, and preliminary empirical results. Realistically, you can do 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 non-Lunch.

In any case, you are strongly encouraged to attend the Psychology and Economics non-lunch (meeting about on most Fridays 1.30-3) if you are interested in making Psychology and Economics one of your fields. In addition, you should attend the Psychology and Economics Seminar (Tu 2-3.30) as much as you can. Spots to go for lunch with outside speakers are available for sign-up.

**Empirical Problem Set.** The alternative assignment is a one-time, significant empirical problem set that is meant to familiarize you with empirical research in Psychology and Economics. The problem set will focus on earning announcements and the response of stock prices to the new information contained in the announcements. 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.
The course webpage is an important instrument for this course (you can find the link from my webpage). 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 problem sets, 40% on the final (in-class) exam, and the remaining 30% on either the paper or empirical problem set.

**Meeting.** The best way to meet is to send me an email to schedule – in fact, you are supposed to email me so we can talk about your paper project!

### Tentative schedule of classes

The schedule will vary somewhat as the class unfolds. It is possible that one of the classes will be cancelled; notice in any case that the class covers about 40 hours of material instead of the Berkeley traditional 28 hours. The syllabus will be updated periodically on course webpage.

**Part I -- Non-Standard Preferences**

January 23 – Lecture 1  
Introduction  
Psychology and Economics: The Methodologies  
Psychology and Economics: The Fields  
Present-Biased Preferences, Part 1  
Status-Quo in Financial Decisions I  
**Methodological Topic: Reading the Psychology Journals**  
**Problem Set 1 on Present-Biased Preferences assigned**

January 30 – Lecture 2  
Present-Biased Preferences, Part 2  
Status-Quo in Financial Decisions II  
Consumption Choices  
**Problem Set 1 on Present-Biased Preferences due**

February 6 – Lecture 3  
Present-Biased Preferences, Part 3  
Life-Cycle Savings  
Summary of the Applications  
**Methodological Topic: Commitment Field Experiment Designs**  
**Methodological Topic: Common Errors in Applying Present-Biased Preferences**  
**Problem Set 2 on Reference Dependence assigned**

February 13 – Lecture 4  
Reference Dependence, Part 1  
Housing Market  
Insurance Choices

February 20 – Lecture 5
Reference Dependence, Part 2
Daily Labor Supply
Financial Decisions
Workplace Decisions

Problem Set 2 on Reference Dependence due

February 27 – Lecture 6
Social Preferences, Part 1
Field Evidence of Gift Exchange
Workplace Relations
Charitable Giving

Methodological Topic: Running a Field Experiment

Meeting Stefano to Discuss Paper Topic

March 6 – No lecture

Part II -- Non-Standard Beliefs
March 13 – Lecture 7
Social Preferences, Part 2
Charitable Giving
Social Pressure
Overconfidence
Law of Small Numbers
Projection Bias

Methodological Topic: The Role of Theory in Experiments

March 20 – No lecture
March 27 – Spring Break – No Lecture

2-page Paper proposals due

Part III -- Non-Standard Decision-Making
April 5 – Lecture 8, Part 2
Limited Attention
eBay Auctions
Consumer Behavior
Framing

April 10 – Lecture 9
Limited Attention, Part 2
Financial Market Evidence

Methodological Topic: Portfolio Methodology
Menu Effects, Part 1
Excess Diversification
Choice Avoidance

Methodological Topic: Clustering Standard Errors
Problem Set 3, Assigned

April 17 – Lecture 10
Menu Effects, Part 2
Preference for Familiar
Preference for Salient
Confusion
Persuasion

April 24 – Lecture 11
Emotions: Mood
Emotions: Arousal
Methodological Topic: Do Markets Eliminate Biases?
Methodological Topic: Lab and Field Experiments
Methodological Topic: Human Subjects Approval
Behavioral IO
Behavioral Corporate Finance
Empirical Problem Set Handed Out
Problem Set 3 due

Part IV – Market Response to Biases

May 1 – Lecture 12
Market Reaction to Biases
Behavioral Labor
Behavioral Finance
Behavioral Political Economy
Behavioral Welfare Economics
Other non-standard features
Empirical Methodologies in Psychology and Economics
Methodological Topic: Five Ways to Write a Psychology and Economics Paper
Conclusion

In-Class Exam, May 8, 12-3

Sunday May 12 (midnight) – Due date for Paper and Empirical Problem Set
Readings

*designates required readings.

The following paper will cover, in a dense manner, the topics covered in the class:


The following articles provide partial overviews of the field of Psychology and Economics:

*An early classic, emphasizes the psychology and its application to economics*

*Not comprehensive, but interesting ideas on the field*

*Classifies most P&E into Bounded Self-Control, Bounded Rationality, and Bounded Self-Interest*

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

*A primer into a number of important social psychology findings, a wonderful classic, just recently was re-printed.*

*A classic of the cognitive psychology literature.*

Part I -- Non-Standard Preferences

January 19 – Lecture 1

_Six Examples of Psychology and Economics_ (We will read these papers later)


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


**January 26 – Lecture 2**

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


**Comparison to Effect of Financial Education**


Present-Biased Preferences: Consumer Behavior I (Investment Goods)
* Ariely, Dan and Wertenbroch, Klaus (2002), “Procrastination, Deadlines, and Performance: Self-Control by Precommitment, Psychological Science, 13 (May), 219-224


February 2 – Lecture 3

Present-Biased Preferences: Consumer Behavior II (Leisure Goods)


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


Methodology: Design of Commitment Field Experiments

Royer, Heather, Mark Stehr, and Justin Sydnor “The Effectiveness of Financial Incentives and Commitment Devices for Gym Usage in the Workplace” Working paper.


Present-Biased Preferences: Seven More Applications


February 9 – Lecture 4

Reference Dependence and the Endowment Effect


Methodology: Effect of Experience


Reference Dependence and Housing Markets

Reference Dependence and Mergers

Reference Dependence and Insurance Choices


February 16 – Lecture 5
**Reference Dependence and Labor supply**


**Reference Dependence and Asset Pricing**


**Reference Dependence and Domestic Violence**

Reference Dependence and Pay-Setting

February 23 – Lecture 6
Social Preferences: Gift Exchange in The Field


Social Preferences: Evidence in The Workplace


Social Preferences: Charitable Giving


Methodology: Running a Field Experiment
Harrison, Glenn and John List. “Field Experiments”. Journal of Economic Literature

**March 2 – Lecture 7**

*Social Preferences: Charitable Giving II*


*Methodology: Theory and Field Experiments*


**Part II -- Non-Standard Beliefs**

*Overconfidence*


*Law of Small Numbers*


**March 9 – Lecture 8, Part 1**

*Projection Bias*


**Part III -- Non-Standard Decision-Making**

**March 9 – Lecture 8, Part 2**

**Limited Attention: Consumption Behavior**


**Limited Attention: eBay Auctions**


**Limited Attention: Financial Market Evidence**


**March 16 – Lecture 9**

**Menu Effects: Excess Diversification**


**Menu Effects: Choice Avoidance**


**Menu Effects: Preference for Familiar**


**Menu Effects: Preference for Salient**


**March 23 and 30 – No Lecture**

**April 6 – Lecture 10**

**Menu Effects: Confusion**

**Persuasion**


**Social Pressure**


**Emotions: Mood**


**April 13 – Lecture 11**
Emotions: Arousal


Methodology: Lab and Field

Methodology: Getting Human Subjects Approval (Dan Acland’s notes)

Market Response to Biases: Employers


Market Response to Biases: Corporate Decisions


Part IV -- Market Response to Biases

April 20 – Lecture 12

Market Response to Bias: Pricing


March 20 – Lecture 13


Market Response to Biases: Behavioral Finance


April 27 – Lecture 13

Market Response to Biases: Politicians


Market Response to Biases: Welfare Maximization

Methodology: Do Markets Eliminate Biases?

Empirical Methodologies in Psychology and Economics

Final Exam (in Class)
Additional Readings

Additional Readings on Present-Biased Preferences

Models


Experimental and Neural Evidence


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

Consumer Behavior

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


Payday effect


Huffman, David and Matias Barenstein. “Riches to Rags Every Month? The Fall in Consumption Expenditures Between Paydays”, Working paper.

Labor Economics

Public Economics


Corporate Finance

Additional Readings on Reference Dependence

Models


Markets

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

**Time preferences**

**Neural evidence**

**Additional Readings on Social Preferences**

*Models*


*Experiments*


*Field Evidence*

*Other*

**Additional Readings on Limited Attention**

*Theory and Experiments*

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


*Financial Markets*


*Voters*

**Additional Readings on Social Pressure and Persuasion**

*Model*

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

*Evidence*


Bernardo A. Huberman, Christoph H. Loch, and Ayse Önçüler “Status as a Valued Resource”, mimeo.


**Additional Readings on Market Response to Biases**

*Market Response to Bias: Pricing*

*Do biases matter?*
Becker, 1962

**Betting**


**Corporate Decisions**


**Empirical and Behavioral Corporate Finance: CEOs**

Jensen and Murphy (1990): “Are CEOs paid like Bureaucrats?”


**Behavioral Finance and Event Studies**


Additional Topics

Framing and Narrow Framing

*Constructed Preferences*

Loewenstein, George and Simonsohn, Uri. “Mistake #37: The Effect of Previously Faced Prices on Current Housing Demand”.

*Framing / Anchoring*

*Bargaining*


*Flypaper effect*
Singhal, Monica. Special Interest Groups and the Allocation of Public Funds, mimeo.

**Neuroeconomics**

Camerer, Colin; Loewenstein, George; Prelec, Drazen. “Neuroeconomics: How Neuroscience Can Inform Economics”

