Applications of Psychology and Economics – Econ 219B  
Spring 2009  
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. (Surprise!) 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 first two Sections of the course, on Non-standard Preferences and on Non-standard Beliefs.

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 reflects the empirical status of economics. In particular, the success of the Psychology and Economics approach will depend largely 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. 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 ideas to their field of interest.

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. This is a great opportunity for students planning to work in the area, since many important questions are still 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.

The 219B course also covers a set of 10 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) econometric issues such as clustering of standard errors and (iii) conceptual issues such as the difference between lab and field experiments and mis-application of present-bias models. These topics are integrated with the other research topic that we cover.
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 abstract. So much of a paper is in the abstract (if the abstract 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.

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 every one that is thinking about writing the paper to come and see me by February 27. Feel free to either come during office hours or to schedule an appointment via email, since feedback from others (whether faculty or fellow students) is always the best way to improve an idea. A two-page written proposal is due by April 2. 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. 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 Lunch.

In any case, you are strongly encouraged to attend the Psychology and Economics lunch (meeting most Fridays 2-3, email tasoff@econ to be added to the list) 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. Finally, keep in mind that we have a group advising session on the Fridays in which the Lunch meets for 2nd/3rd years on.
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 the estimation of a field experiment on charitable giving. We may also have, in alternative, another empirical problem set 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.

As for the other two requirements, the problem sets will test your knowledge of modeling 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, on Menu Effects, and a fourth one on Field Experiments.

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 (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.

Tentative schedule of classes

The schedule will vary somewhat as the class unfolds. The syllabus will be updated periodically on course webpage.

Part I -- Non-Standard Preferences

January 21 – Lecture 1
Introduction
Psychology and Economics: The Methodologies
Psychology and Economics: The Fields
Present-Biased Preferences, Part 1
Methodological Topic: Reading the Psychology Journals
Problem Set 1 on Present-Biased Preferences assigned

January 28 – Lecture 2
Present-Biased Preferences, Part 2
Status-Quo in Financial Decisions
Consumption Choices
Problem Set 1 on Present-Biased Preferences due

February 4 – Lecture 3
Present-Biased Preferences, Part 3
Consumption Choices
Life-Cycle Savings I
Summary of the Applications
Methodological Topic: Common Errors in Applying Present-Biased Preferences

February 11 – Lecture 4
Reference Dependence, Part 1
Endowment Effect
Daily Labor Supply
Methodological Topic: Effect of Experience
Problem Set 2 on Reference Dependence assigned

February 18 – Lecture 5
Reference Dependence, Part 2
Insurance Choices
Financial Decisions
Effort on the Job
Housing Market
Methodological Topic: Clustering Standard Errors
Problem Set 2 on Reference Dependence due
February 25 – No Lecture
*Meeting Stefano to Discuss Paper Topic*

March 4 – No Lecture
*Meeting Stefano to Discuss Paper Topic*

March 11 – Lecture 6
Social Preferences, Part 1
Charitable Giving
Methodological Topic: Running a Field Experiment

March 18 – Lecture 7
Social Preferences, Part 2
Field Evidence of Gift Exchange
Workplace Relations

March 25 – Spring Break – No Lecture

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

April 1 – Lecture 8
Overconfidence
Law of Small Numbers
Projection Bias

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

April 8 – Lecture 9
Limited Attention, Part 1
eBay Auctions
Financial Market Evidence
Voter Behavior
Methodological Topic: Portfolio Methodology
*Problem Set 3 assigned*

April 15 – Lecture 10
Menu Effects, Part 1
Excess Diversification
Choice Avoidance
Preference for Familiar
Methodological Topic: Do Markets Eliminate Biases?
*Problem Set 3, Part 1 due*

April 22 – Lecture 11
Menu Effects, Part 2
Preference for Salient
Confusion
Persuasion
Social Pressure
Methodological Topic: Human Subjects Approval (Dan Acland)
*Problem Set 3, Part 2 due*
Also: 2-page Paper proposals due

**Part IV – Market Response to Biases**
April 29 – Lecture 12
   Emotions (from Non-Standard Decision-Making Section)
   Market Reaction to Biases, Part 1
      Behavioral IO
      Behavioral Labor
   **Methodological Topic:** Lab and Field Experiments

May 6- Lecture 13
   Market Reaction to Biases, Part 2
      Behavioral Finance
      Behavioral Corporate Finance
      Behavioral Political Economy
      Behavioral Welfare Economics
   Empirical Methodologies in Psychology and Economics
   **Methodological Topic:** Five Ways to Write a Psychology and Economics Paper
   Conclusion
   *Empirical Problem Set Handed Out*

? – Final 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 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:

*A 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, still a classic*

*A classic of the cognitive psychology literature.*

Part I -- Non-Standard Preferences

January 23 – 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 30 – 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 6 – Lecture 3

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


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


**Present-Biased Preferences: Six More Applications**

**Methodology: Common Errors in Applying Present-Biased Preferences**

February 13 – Lecture 4

Reference Dependence and the Endowment Effect


February 20 – Lecture 5

Methodology: Effect of Experience


Reference Dependence and Labor supply


**Reference Dependence and Insurance Choices**


**February 27 – Lecture 6**

**Reference Dependence and Housing Markets**


**Reference Dependence and Asset Pricing**


**Reference Dependence and Pay-Setting**


March 5 – Lecture 7

Social Preferences: Charitable Giving


Social Preferences: Evidence in The Workplace


Social Preferences: Gift Exchange in The Field


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

Duflo-Kremer
Part II -- Non-Standard Beliefs

March 12 – Lecture 8

**Overconfidence**


CVF 23


**Law of Small Numbers**


**Projection Bias**

Part III -- Non-Standard Decision-Making

March 19 – Lecture 9

Limited Attention: eBay Auctions


Limited Attention: Financial Market Evidence


Limited Attention: Consumption Behavior


March 26 – Spring Break – No Lecture

April 2 – Lecture 10

Menu Effects: Excess Diversification


Menu Effects: Choice Avoidance


**Menu Effects: Preference for Familiar**


**Menu Effects: Preference for Salient**


**April 9 – Lecture 11**
**Menu Effects: Confusion**


**Persuasion**


**Methodology: Getting Human Subjects Approval (Dan Acland)**
Social Pressure


April 16 – Lecture 12
Social Pressure II

Emotions: Mood


Emotions: Arousal


Methodology: Lab and Field
Part IV -- Market Response to Biases

April 23 – Lecture 13


Methodology: Clustering of Standard Errors

April 30 – Lecture 14


**Market Response to Biases: Corporate Decisions**


**Market Response to Biases: Politicians**


**Market Response to Biases: Welfare Maximization**


**Methodology: Do Markets Eliminate Biases?**

*Empirical Methodologies in Psychology and Economics*

**May 7 – 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

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

Evidence

Evidence

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

Evidence

Evidence

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”

