Applications of Psychology and Economics – Econ 219B  
Spring 2015  
Wednesday 12-3, 639 Evans Hall  

Instructor: Stefano DellaVigna, 515 Evans Hall  
sdellavi@econ.berkeley.edu  

Syllabus  

Features of this course  

This course is the continuation of the 219A class in Psychology and Economics – Theory, taught by Justin Sydnor. 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, corporate finance, consumption, development economics, environmental economics, industrial organization, labor economics, political economy, and public economics. 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, Reference Dependence, on Social Preferences, and on Behavioral IO.

**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. You will have some previous exams to practice.

**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 email and see me during Matthew’s part of the semester or at the beginning of my part, and no later than the week before Spring break. A two-page written proposal is due after Spring Break. The final 10-15 page paper is due on May 15.

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 on some Fridays 10.30-12) 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. 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.

**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. The syllabus will be updated periodically on the 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
  - Status-Quo in Financial Decisions
- **Methodological Topic:** Reading the Psychology Journals

*Problem Set 1 on Present-Biased Preferences assigned*

**January 28 – Lecture 2**
- Present-Biased Preferences, Part 2
- Present-Bias and Status Quo
- Consumption Choices: Investment Goods
  - Homework Completion
  - Exercise

*Problem Set 1 on Present-Biased Preferences due*

**February 4 – Lecture 3**
- Present-Biased Preferences, Part 3
  - Consumption Choices: Investment Goods
  - Work Effort
  - Consumption Choices: Leisure Goods
  - Credit Card Borrowing
  - Consumption-Savings
  - Laboratory Evidence
- **Methodological Topic:** Commitment Field Experiment Designs
- **Methodological Topic:** Common Errors in Applying Present-Biased Preferences

*Problem Set 2 on Reference Dependence assigned*

**February 11 – Lecture 4**
- Reference Dependence, Part 1
  - Housing Market
  - Mergers
February 18 – Lecture 5
  Reference Dependence, Part 2
    The New Bunching-Based Evidence:
      Taxes
      Running
      Job Search
      Daily Labor Supply
      Financial Decisions
  Problem Set 2 on Reference Dependence due

February 25 – Lecture 6
  Reference Dependence, Part 3
    Workplace Effort
    Insurance Choices
  Problem Set 3 on Social Preferences assigned

March 4 – Lecture 7
  Social Preferences, Part 1
    Wave I: Altruism and Warm Glow
    Altruism within Workplace
    Shaping Social Preferences
    Wave II: Inequity Aversion and Reciprocity
    Methodological Topic: Running a Field Experiment

March 11 – Lecture 8
  Social Preferences, Part 2
    Gift Exchange in the Lab and Field
    Wave III: Social Pressure, Social Signaling
    Social Pressure and Charitable Giving
    Social Pressure
  Problem Set 3 on Social Preferences due

Week of March 11 – Meet Stefano to discuss paper topic

Part II -- Non-Standard Beliefs
March 18 – Lecture 9
  Overconfidence
  Law of Small Numbers
  Projection Bias
  Two-page proposal due

March 25 – Spring Break – No Lecture

Week of April 2 – Meet Stefano again to discuss progress on paper topic

Part III -- Non-Standard Decision-Making
April 1 – Lecture 10
  Limited Attention
  Shipping Costs
  Taxes
Left-Digit Inattention
Financial Market Evidence
Methodological Topic: Portfolio Methodology

April 8 – Lecture 11
Framing
Menu Effects
Choice Avoidance
Preference for Familiar
Preference for Salient
Confusion
Persuasion
Problem Set 4, Assigned

April 15 – Lecture 12
Emotions: Mood
Emotions: Arousal
Methodological Topic: Lab and Field Experiments
Happiness
Empirical Problem Set Handed Out

Part IV – Market Response to Biases
April 22 – Lecture 13
Market Reaction to Biases, Part 1
Behavioral IO
Behavioral Corporate Finance
Behavioral Labor
Behavioral Political Economy
Methodological Topic: Markets and Non-Standard Behavior
Problem Set 4 due

April 29 – Lecture 14
Market Reaction to Biases, Part 2
Behavioral Finance
Behavioral Welfare Economics
Conclusion

In-Class Exam (during RRR period), May 6, 12-3

Friday May 15 (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
Lecture 1

*Status-Quo Bias in Financial Decisions*


**Comparison to Effect of Financial Education**


**Lecture 2**

* Status-Quo Bias in Financial Decisions, Explained with Present Bias*


* Other Default Effects*


**Present-Biased Preferences: Investment Goods**


**Lecture 3**

* Present-Biased Preferences: Investment Goods II*


**Present-Biased Preferences: Leisure Goods**


Frank Schilbach. 2015. “Alcohol and Self-Control: A Field Experiment in India”

Methodology: Design of Commitment Field Experiments


Lecture 4
Present-Biased Preferences: Evidence from the Laboratory
Jess Benhabib, Alberto Bisin, Andrew Schotter. “Present-bias, quasi-hyperbolic discounting, and fixed costs”, Games and Economic Behavior, Volume 69, Issue 2, July 2010, Pages 205-223


Mark Dean and Anja Sautmann. 2014. “Credit Contraints and the Measurement of Time Preferences”


Reference Dependence and Housing Markets

Methodology: Bunching-Based Evidence of Reference Dependence

Lecture 5

Reference Dependence and Labor Supply


Reference Dependence and Equity Premium


Reference Dependence and Job Search

DellaVigna, Stefano; Attila Lindner, Balazs Reizer, and Johannes Schmieder. 2014. “Reference Dependent Job Search: Evidence from Hungary”

Reference Dependence and Endowment Effect


Reference Dependence: Forward vs. Backward Looking


Lecture 6
Reference Dependence and Effort

Reference Dependence and Domestic Violence

Reference Dependence and Insurance Choices

Lecture 7
Social Preferences Wave I: Altruism
Workplace Effort: Altruism

Shaping Social Preferences

Social Preferences Wave I: Warm Glow and Charitable Giving


Social Preferences Wave II: Inequity Aversion and Reciprocity


Workplace Effort: Inequity Aversion

**Methodology: Field Experiments**

**Lecture 8**

**Social Preferences in the Workplace: Gift Exchange and Vertical Preferences**


**Gift Exchange in Charitable Giving**

**Social Preferences Wave III: Moral Wriggle-Room, Social Pressure, and Signaling**

**Social Pressure**


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

**Lecture 9**

*Overconfidence*


*Law of Small Numbers*


Projection Bias


Limited Attention: Introduction


Part III -- Non-Standard Decision-Making

Lecture 10
Limited Attention: Consumption Behavior


Limited Attention: Financial Market Evidence


Lecture 11

_Framing_


_Menu Effects: Choice Avoidance_


_Menu Effects: Preference for Familiar_


_Menu Effects: Preference for Salient_


Menu Effects: Confusion


Persuasion


Lecture 12
Emotions: Mood


Emotions: Arousal


Methodology: Lab and Field
Happiness


Part IV -- Market Response to Biases
Lecture 13
Market Response to Bias: Pricing


Market Response to Biases: Corporate Decisions


Market Response to Biases: Employers


*Market Response to Biases: Politicians*


**Lecture 14**

*Market Response to Biases: Behavioral Finance*


*Market Response to Biases: Welfare Maximization*

Bhargava, Saurabh and Day Manoli. (2013) “Why are benefits left on the table? assessing the role of information, complexity, and stigma on take-up with an IRS field experiment”