Human Behavior and Economic Policy (2013-400-EBC4202) Course Manual

January 2014

1 Course Description

In this course we study developments in modern (aka non-standard or behavioral) economic theory and apply it to important questions of economic policy. We will discuss several economically important/interesting topics. The basic structure will be to first study (theoretically or empirically) some aspect of human behavior. We will then shift attention to policy-related work in order to see whether one's decisions can somehow be improved or changed in a meaningful way. Examples of this approach include:

- 1. Many public and private decision situations involve risk and uncertainty as well as intertemporal aspects. The decision (not) to buy a lottery ticket is a simple example. Economically more important are decisions concerning health insurance and pension savings. Standard microeconomic models assume that people make unbiased and consistent, i.e., rational, choices when deciding about insurances and savings accounts. However, there is ample evidence that decisions are often biased and inconsistent with potentially disastrous effects like underinsurance in case of illness or when old aged. Therefore, relying solely on traditional economic models may lead to misleading or even wrong economic policy prescriptions.
- 2. An important task of the state is to collect taxes. With the revenue from taxes infrastructure, education, environmental protection and public goods can be financed. Taxes can also be used to mitigate behavior considered as damaging the individual and/or environment, like, e.g., smoking or polluting the environment. It is, therefore, important to know how people respond to changes of taxes. Standard optimal taxation theory makes very clear predictions about how people will response and provides important policy implications. However, what if people to not respond as predicted by theory?
- 3. When the market fails other mechanisms of supplying and allocating goods have to be considered. The classical example is the provision and distribution of public goods and the engagement in collective actions. Traditional economic theory suggests that people will always free-ride on other people's contributions, which leads to undersupply of the commodity in question and is a rationale for government intervention.

2 Objectives

The objective of the course is to endow students with theoretical knowledge about traditional and modern theoretical models relevant for economic policy. Additionally, the student will learn to critically discuss these models and apply them to decisions typical for the public domain, like health/education reform, retirement savings, taxation, and collective action.

3 Structure and Requirements

This course consists of 14 meetings of two hours each. The first meeting will be used to make introductions and to discuss the basic elements of the class.

There will be two distinct kinds of meetings: "lecture"-type meetings in which I will take the lead and introduce new theoretical models or empirical evidence about a particular aspect of human behavior and "discussion"-type meetings in which students will take the lead discussing certain policy-relevant applications of the theory. Specifically, each such meeting will be divided into two blocks of 55 minutes. For each block:

- 1. One student (or two depending on enrollment) will give a 35-40 minute presentation on a paper (or set of closely related papers) of their choosing (from the reading list, unless prior approval is granted). The presentation should include:
 - The problem under consideration
 - The methodology used
 - The main results
 - The policy implications of the results
 - Strengths and weaknesses of the study and questions which, in the opinion of the presenter(s) are still open or were not satisfactorily addressed by the paper.¹
- 2. A class-wide discussion of the paper. The class at large may ask questions about the paper or discuss any of the points raised by the presentation or the paper's broader implications. One reasonable goal would be to brainstorm on how the study could be followed-up or extended to gain additional insights.
- 3. Feedback.

While the presenters will obviously have to go through the paper(s) they are presenting in great detail, all students are expected to have read the material **before** the meeting. To facilitate this, all students should prepare a one page (typed) summary of the readings which includes a critical assessment and at least three relevant questions. These summaries should be **emailed** to the coordinator before each meeting and will count towards your class participation mark.²

The course is concluded with the Final Paper that each student works on personally. This paper can be either an answer to some (small) research question relevant for this course and not answered in the literature, or literature overview of some topic relevant to the course. The particular topics can be (should be?) discussed with the coordinator.

4 Evaluation and Credit

- 51% Participation which includes:
 - your physical and mental presence in each meeting (17%)
 - the quality of your presentation(s) (17%)
 - your one-page summaries (17%).

The presence and the presentations will be assessed on 0 to 10 scale, each summary will be given 0/1 "grade."

• 49% Final Paper (20 pages, 1.5 spacing)

Each part has to be passed independently (5.5 or higher).

¹In my experience, students are afraid to be critical of a paper which was published in a prestigious journal. While natural, this is a fear that you should try to overcome. Even the most well-thought out papers leave many questions unanswered. You should, therefore, pay particular attention to what was left out and what additional questions you have or things you could do to further deepen our understanding of the behavioral problem and the policy responses to it.

²The summaries will also give the students some practice in writing and expressing own thoughts, which is indispensable when writing the thesis.

5 Literature

Most of the course readings will consist of slides from "lecture"-type meetings that will be posted on eleUM. In addition, for the policy-led discussions, academic papers will be the main source of reading material. These will also be posted on eleUM and are listed below, organized by topic. Those papers denoted by a (P) are ones that are suitable for student-led discussions and can be chosen for presentations. Those papers marked with a ● are more theory/background material and will be discussed by coordinator, in varying detail, in the introductory lecture for each topic.

1. Time Inconsistency, Self-Control Problems and Retirement Savings

(3 Meetings: 1 Theory, 2 Student-led Discussions)

- Frederick, Shane, Loewenstein, George, and O'Donoghue, Ted (2002): "Time Discounting and Time Preference: A Critical Review," *Journal of Economic Literature*, XL, 351–401.
- Laibson, David (1997): "Golden Eggs and Hyperbolic Discounting," Quarterly Journal of Economics, 112, 443–477.
- Thaler, Richard (1981): "Some Empirical Evidence on Dynamic Inconsistency," *Economics Letters*, 8, 201–207.
- (P) Thaler, R. and S. Benartzi (2004): "Save More Tomorrow: Using Behavioral Economics to Increase Employee Savings," *Journal of Political Economy*, 112(1), S164–S187.
- (P) Madrian, B.C. and D.F. Shea (2001): "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," The Quarterly Journal of Economics, 116(4), 1149–1187.
- (P) 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, (May), 635–672.
- (P) Duflo, Esther, Michael Kremer and Jonathan Robinson, (2011): "Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence From Kenya," American Economic Review, 101, 2350–2390.
- (P) Giné, Xavier, Dean Karlan and Jonathan Zinman, (2010): "Put Your Money Where Your Butt Is: A Commitment Contract for Smoking Cessation," American Economic Journal: Applied Economics, 2, 213– 235.
- (P) Hastings, Justine S. and Olivia S. Mitchell, (2011): "How Financial Literacy And Impatience Shape Retirement Wealth And Investment Behaviors," NBER Working Paper 16740.

2. Decisions Under Risk and Uncertainty

(2 Meetings: 1 Theory, 1 Student-Led Discussion)

- Kahneman, Daniel, and Tversky, Amos (1979): "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica*, 47, 263–291.
- Tversky, Amos, and Kahneman, Daniel (1992): "Advances in Prospect Theory," Journal of Risk and Uncertainty, 5, 297–323.
- (P) Camerer, Colin (2001): "Prospect Theory in the Wild: Evidence from the Field, in Choices, Values, and Frames," Daniel Kahneman and Amos Tversky (eds.), Cambridge: Cambridge University Press, 288–300.
- (P) Kearney, Melissa, Peter Tufano, Jonathan Guryan and Erik Hurst (2010): "Making Savers Winners: An Overview of Prize-Linked Savings Products," NBER Working Paper 16433.
- (P) Atalay, Kadir, Fayzan Bakhtiar, Robert Slonim and Stephen Chang (2012): "Savings and Prize-Linked Savings Accounts," Working Paper.
- (P) Wakker, Peter P., Daniëlle R.M. Timmermans and Irma Machielse, (2007): "The Effects of Statistical Information on Risk and Ambiguity Attitudes, and on Rational Insurance Decisions," *Management Science*, 53(11), 1770–1784.

(P) Schram, Arthur and Joep Sonnemans, (2011): "How individuals choose health insurance: An experimental analysis," *European Economic Review*, 55(6), 799–819.

3. The Role of Incentives: Pay for Performance in Education and Health Care Reform

(2 Meetings: 1 Theory, 1 Student-led Discussion)

- Bowles, Samuel and Sandra Polanía-Reyes (2012): "Economic Incentives and Social Preferences: Substitutes of Complements?" *Journal of Economic Literature*, 50(2): 368–425.
- Bowles, Samuel (2008): "Policies Designed for Self-Interested Citizens May Undermine 'The Moral Sentiments': Evidence from Economic Experiments," *Science*, 320, 1605–1609.
- Gneezy, Uri and Aldo Rustichini, (2000): "A Fine is a Price," Journal of Legal Studies, 29(1), 1–17.
- (P) Fryer, Roland G. (2011): "Teacher Incentives and Student Achievement: Evidence From New York City Public Schools," NBER Working Paper 16850.
- (P) Springer, Matthew G. et al (2010): "Teacher Pay For Performance: Experimental Evidence from the Project on Incentives in Teaching," National Center on Performance Incentives.
- (P) Petersen, Laura A et al (2006): "Does Pay-for-Performance Improve the Quality of Health Care?" Annals of Internal Medicine, 145, 265–272.
- (P) Rosenthal, Meredith B. and Richard G. Frank, (2006): "What Is The Empirical Basis for Paying for Quality in Health Care?" Medical Care Research and Review, 63(2), 135–157.
- (P) Angrist, Joshua and Jonathan Guryan, (2008): "Does Teacher Testing Raise Teacher Quality? Evidence From State Certification Requirements," *Economics of Education Review*, 27, 483–503.

4. Taxes and Labour Market Policy

(2 Meetings: 1 Theory, 1 Student-led Discussion)

- Babcock, Linda, William Congdon, Lawrence Katz and Sendhil Mullainathan, (2010): "Notes on Behavioral Economics and Labor Market Policy," Working Paper.
- O'Donoghue, Ted and Matthew Rabin, (2006): "Optimal Sin Taxes," *Journal of Public Economics*, 90(10-11), 1825–1849.
- Congdon, William, Jeffrey Kling and Sendhil Mullainathan, (2009): "Behavioral Economics and Tax Policy," Working Paper.
- (P) Ruffle, Bradley, (2005): "Tax and subsidy incidence equivalence theories: experimental evidence from competitive markets," *Journal of Public Economics*, 89(8), 1519–1542.
- (P) Chetty, Raj, Adam Looney and Kory Kroft, (2009): "Salience and Taxation: Theory and Evidence," *American Economic Review*, 99(4), 1145–1177.
- (P) Chetty, Raj and Emmanuel Saez, (2013): "Teaching the Tax Code: Earnings Responses to an Experiment with EITC Recipients," American Economic Journal: Applied Economics, 5(1), 1–31.

5. Collective Action, Institutions & Charitable Giving

(2 Meetings: 1 Theory, 1 Student-led Discussion)

- List, John A, (2011): "The Market for Charitable GIving," Journal of Economic Perspectives, 25(2), 157–180
- Ostrom, Elinor, (2000): "Collective Action and the Evolution of Social Norms," *Journal of Economic Perspectives*, 14(3), 137–158.
- Ostrom, Elinor, James Walker and Roy Gardner, (1992): "Covenants With and Without a Sword: Self-Governance is Possible," *American Political Science Review*, 86(2), 404–417.

- (P) Fehr, Ernst and Simon Gächter, (2000): "Cooperation and Punishment in Public Goods Experiments," *American Economic Review*, 90, 980–994.
- (P) Kosfeld, Michael, Akira Okada and Arno Riedl, (2009): "Institution Formation in Public Goods Games," *American Economic Review*, 99(4), 1335–1355.
- (P) Karlan, Dean, John A. List and Eldar Shafir, (2011): "Small matches and charitable giving: Evidence from a natural field experiment," *Journal of Public Economics*, 95, 344–350.
- (P) Spencer, Michael A., Stephen K. Swallow, Jason F. Shogren and John A. List, (2009): "Rebate rules in threshold public good provision," *Journal of Public Economics*, 93, 798–806.
- (P) Craig E. Landry, Andreas Lange, John A. List, Michael K. Price and Nicholas G. Rupp, (2010): "Is a Donor in Hand Better than Two in the Bush? Evidence from a Natural Field Experiment," American Economic Review, 100, 958–983.

6. Other Possible Topics

(1 Meeting: 1 Student-Led Discussion)

- School Choice and Student Achievement
 - Hastings, Justine S., Christopher A. Neilson and Seth D. Zimmerman, (2012): "The Effect Of School Choice On Intrinsic Motivation And Academic Outcomes," NBER Working Paper 18324.
 - Hastings, Justine S., Richard Van Weelden and Jeffrey M. Weinstein, (2007): "Preferences, Information, and Parental Choice Behavior in Public School Choice," Working Paper.
 - Hoxby, Caroline, (2003): "School Choice and School Productivity: Could School Choice Be a Tide that Lifts All Boats?" In *The Economics of School Choice*, ed. Caroline Hoxby, 287–341. Chicago: University of Chicago Press, 2003.
- Lessons From The UK Government's Behavioural Insights Team
 - http://www.cabinetoffice.gov.uk/behavioural-insights-team
- Others??

Some "lighter" reading that you may want to consider to provide some of the recent books available in the popular press. Three such examples include:

- Congdon, William J., Jeffrey R. Kling and Sendhil Mullainathan. *Policy and Choice: Public Finance through the Lens of Behavioral Economics*, Brookings Institution Press, Washington, D.C., 2011³
- Thaler, Richard H. and Cass R. Sunstein. Nudge: Improving Decisions About Health, Wealth and Happiness, Yale University Press, New Haven, CT, 2008.
- Kahneman, Daniel. Thinking, Fast and Slow, Farrar, Strauss and Grioux, New York, NY, 2011.

³Available as a free download from Mullainathan's website.

6 Schedule of the Meetings

| Week | Day | Date | Meeting | Subject, Literature, Tasks |
|------|-----|--------|---------|--|
| 6 | Tue | Feb 4 | L-01 | Introductory Lecture |
| | Fri | Feb 7 | L-02 | Time Inconsistency, Self-Control Problems and Retirement Savings |
| 7 | Tue | Feb 11 | T-01 | Time Inconsistency, Self-Control Problems and Retirement Savings |
| | Fri | Feb 14 | T-02 | Time Inconsistency, Self-Control Problems and Retirement Savings |
| 8 | Tue | Feb 18 | L-03 | Decisions Under Risk and Uncertainty |
| | Fri | Feb 21 | T-03 | Decisions Under Risk and Uncertainty |
| 9 | Tue | Feb 25 | L-04 | The Role of Incentives: Pay for Performance |
| | Fri | Feb 28 | T-04 | The Role of Incentives: Pay for Performance |
| 10 | | | | |
| 11 | Tue | Mar 11 | L-05 | Taxes and Labour Market Policy |
| | Fri | Mar 14 | T-05 | Taxes and Labour Market Policy |
| 12 | Tue | Mar 18 | L-06 | Collective Action, Institutions & Charitable Giving |
| | Fri | Mar 21 | T-06 | Collective Action, Institutions & Charitable Giving |
| 13 | Tue | Mar 25 | T-07 | Other Possible Topics |
| | Fri | Mar 28 | T-08 | Other Possible Topics |

The horizontal lines separate the meetings by weeks. There are two types of meetings: lectures (L-xx) where I will present new material and tutorials (T-xx) where students will make presentations.

7 Contact Information

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