Applications of Psychology and Economics – Econ 219B Spring 2005 Wednesday 12-3, 639 Evans Instructor: Stefano DellaVigna, 515 Evans. sdellavi@econ.berkeley.edu.

Homework 2. Due on February 8 at 12pm

The second weekly homework will be a brief (one- to two-pages overall) report on two field experiments, the papers by Ausubel (1999), and the paper by Ariely and Wertenbroch (2002).

*Ausubel, Lawrence. "Adverse Selection in the Credit Card Market", Working Paper, University of Maryland, June 1999. http://www.ausubel.com/creditcard-papers/adverse.pdf

*Ariely, Dan and Wertenbroch, Klaus (2002), "Procrastination, Deadlines, and Performance: Self-Control by Precommitment, *Psychological Science*, 13 (May), 219-224 <u>http://web.mit.edu/ariely/www/papers/deadlines.pdf</u>

Field experiments are characterized by two features:

- i. they are experiments, that is, participants are divided into group based on random assignment;
- ii. they take place in the field, that is in a real market, as opposed to in a laboratory. Subjects often do not know that they are participating in an experiment.

Ausubel randomizes the pre- and post-teaser interest rates, while Ariely and Wertenbroch randomize the deadline structure. (For Ausubel paper, focus on the results on consumer rationality)

Here are three points for your response paper. Address two of them:

1. How do you interpret the evidence in these papers? Are there theories that do a good job of organizing the data in the two papers? (Be particularly careful in interpreting the two graphs in Ausubel's paper, I find them not so easy to understand)

2. Larry Ausubel found a gold mine when he convinced a large credit card company to give him the results of the experiments that the company itself had already run. All he had to do was knock at the door of the right company. Think about companies that may have run randomized experiments like these, and think of data sets they could give you. Alternatively, think of companies that you could convince to run experiments. Which companies can you think of? What experiments would these be? What theories could you test? (It may help to think at all the ways in which companies collect data on consumers using scanners, internet, swipe cards)

3. Finally, while sometimes it is great to be able to randomly assign people in groups, sometimes it is better to observe consumers themselves choosing between contract. An example is in the paper on health clubs below. In this paper we exploit the fact that consumers can *choose* between monthly and pay-per-visit contract. Would it help us if consumers were randomly allocated between the two contracts? Say that half of the consumers gets a monthly contract and half a pay-per-visit contract, and we observe their attendance and renewal behavior. What could we conclude about consumer preferences and self-control?

*DellaVigna, Stefano and Malmendier, Ulrike. "Overestimating Self-control: Evidence from the Health Club Industry", October 2002. <u>http://emlab.berkeley.edu/users/sdellavi/wp/self_control_oct02.pdf</u>

Remember, the homework is due on Tuesday by noon. See you next week!