

Written Exam Economics summer 2016

Foundations of Behavioural Economics

June 03, 2016

(3-hour closed book exam)

This exam question consists of 4 pages in total, including this one.

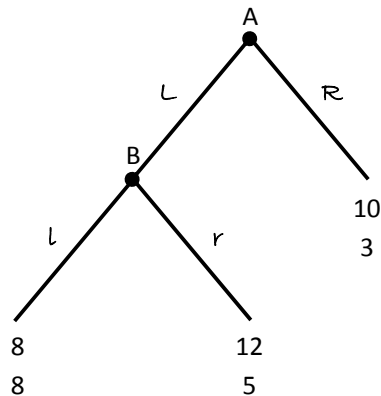
The exam consists of 4 questions with several subquestions. In order to get the best possible grade, you must answer all questions. Please note that, because of differences in the workload needed to answer the questions, different (parts of the) questions may have different weights. When answering mathematical questions, all steps of your analysis must be comprehensible. When answering non-technical questions, your answers can be short and concise (e.g., using bullet points), but your arguments must be explained sufficiently.

Good Luck!

Question 1:

During the course we talked about different types of social preferences. In particular, we focused on the theory of inequality aversion by Fehr and Schmidt (1999) and the theory of sequential reciprocity by Dufwenberg and Kirchsteiger (2004).

- a) Please give a brief overview of the experimental evidence that has inspired the development of these two theories.
- b) Consider the following strategic situation:



Assume player A and B are motivated by inequality aversion (Fehr and Schmidt 1999). For which values of α and β is (L, l) a subgame perfect equilibrium?

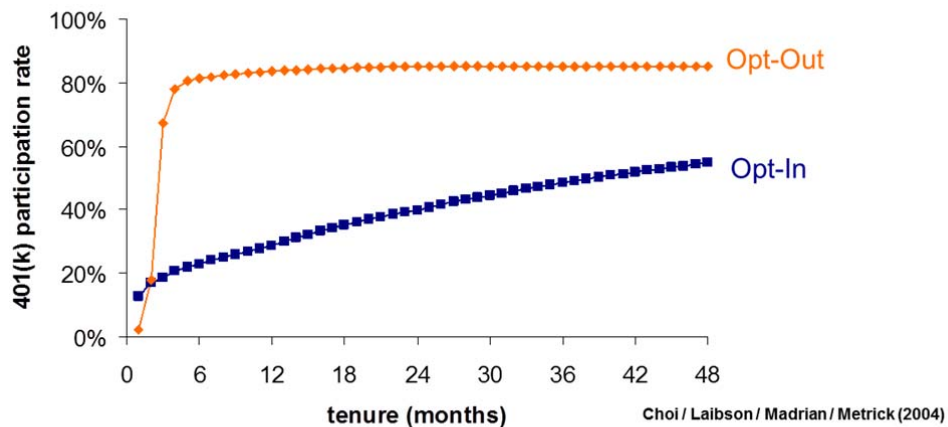
- c) Consider again the situation described in Part b), but now assume that player B and A are motivated by belief-dependent reciprocity (Dufwenberg and Kirchsteiger 2004). For which values of the sensitivity to reciprocity γ_A and γ_B is (L, r) a sequential reciprocity equilibrium?

Question 2:

- a) What is the key difference between the Kőszegi-Rabin model of reference-dependent preferences and prospect theory?
- Discuss the assumptions regarding reference points in both models (verbally or using the respective utility functions as illustration).
 - Illustrate the differences with an example of behavior or a person's "feelings" (in terms of perceived utility) that is consistent with Kőszegi-Rabin, but not with prospect theory.
- b) What are the main challenges in empirically testing the Kőszegi-Rabin model?
- Discuss, in particular, which difficulties arise if one wants to test the validity of the model's assumptions regarding the reference point.
 - Give an example of a study that aims at testing the Kőszegi-Rabin model, and illustrate how this study solves the challenge.
 - What was the main result of the study?

Question 3:

- a) Time preferences are often measured using experiments that involve decisions between "sooner-smaller" and "later-larger" rewards. Discuss (at least) two major challenges that such experiments have to deal with:
- Explain why these issues might distort the measurement of people's "true" time preferences.
 - Discuss how (some of) the problems can be addressed by appropriately adjusting the experimental setup and procedures.
- b) Consider the following figure taken from Choi et al. (2004). What is depicted in the graph? Explain, in particular, the key difference between the "opt-in" and "opt-out" regime.



- c) Briefly sketch the most important additional effects of default specifications on savings behavior in 401(k) plans.
- d) Are the findings from b) and c) consistent with exponential discounting? Explain which aspects of the decision environment and empirical findings make you confident that exponential discounting cannot account for the findings.
- e) Can the findings be explained by quasi-hyperbolic discounting? Explain. How does the answer depend on whether you assume that quasi-hyperbolic discounters are sophisticated or naive?
- f) Can you provide an alternative explanation (unrelated to time preferences) that is consistent with the findings described in part b) and c)? Explain.

Question 4:

Discuss whether experience with a decision situation eliminates deviations from “standard” Expected Utility Theory.

- a) Describe an example in which deviations from Expected Utility Theory become less pronounced (or one where they do NOT become less pronounced) once people gain experience with the decision situation. How was the influence of experience tested in your example?
- b) Discuss potential difficulties in measuring and causally identifying the impact of experience on behavior. How do different empirical approaches cope with these difficulties?
- c) Discuss whether the observation that people might converge towards the predictions of Expected Utility Theory after having gained experience would be a major criticism of the field of Behavioral Economics. You can use your example from above to illustrate your arguments.