

Written Exam for the B.Sc. or M.Sc. in Economics winter 2015-16

Behavioral Economics & Finance

Final Exam/ Elective Course/ Master's Course

February 16, 2016

(2-hour closed book exam)

Please note that the language used in your exam paper must correspond to the language of the title for which you registered during exam registration. I.e. if you registered for the English title of the course, you must write your exam paper in English. Likewise, if you registered for the Danish title of the course or if you registered for the English title which was followed by “eksamen på dansk” in brackets, you must write your exam paper in Danish.

This exam question consists of 2 pages in total

Question 1: True or False

Please indicate if the following statements are true or false. Explain your answer.

- A. In prospect theory, people are risk-seeking in the gain domain.
- B. Let $\pi(\cdot)$ denote the weighting function and \mathbf{p} the probability of an uncertain event. Prospect theory implies that $\pi(r\mathbf{p})=r\pi(\mathbf{p})$ for $0<r<1$, which is denoted *subadditivity*.
- C. The discounted utility model allows for people to have time-inconsistent preferences.
- D. Suppose you face a bet, where you win USD 200 and lose USD 100 with equal probability. If you exhibit Myopic Loss Aversion, and have a loss aversion factor of 2.5, you will reject the bet if it is played once, but accept it if it played twice.
- E. The term ‘disposition effect’ relates to the tendency of people to perform momentum trading.

Question 2: Ellsberg Paradox

Suppose you have 30 red balls and 60 other balls that are either black or yellow. Two different groups (with similar people) are faced with the choice between two gambles:

Group 1:

Gamble A: You receive USD 100 if you draw a red ball.

Gamble B: You receive USD 100 if you draw a black ball.

Group 2:

Gamble C: You receive USD 100 if you draw a red ball or yellow ball.

Gamble D: You receive USD 100 if you draw a black ball or yellow.

- A. Using this example, explain the Ellsberg Paradox.
- B. Explain how Maxmin expected utility can explain behavior observed under the ‘Ellsberg Paradox’.

Question 3: Social preferences

The Fehr & Schmidt (1999) model can be summarized as:

$$u_i(\cdot) = x_i - \alpha_i[\max\{x_j - x_i, 0\}] - \beta_i[\max\{x_i - x_j, 0\}]$$

- A. Explain the model (parameters, variables), and explain the intuition of the model.
- B. Describe and explain a situation, where the Fehr-Schmidt model has been applied to explain behavior. Discuss alternative models/explanations to describe behavior in this situation.