

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

**Behavioral Economics & Finance**

Final Exam/ Elective Course/ Master's Course

December 16, 2015

(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. The idea that people exhibit a fear of negative evaluation by others is consistent with the theory of Ambiguity Aversion.
- B. Let  $\pi(\cdot)$  denote the weighting function and  $p$  the probability of an uncertain event. Prospect theory implies that  $\pi(p) + \pi(1-p) = 1$ , which is denoted *subcertainty*.
- C. If people believe a sequence of coin flips (H=heads, T=tails) HHHHH to be less likely than the sequence HTHTT, we say such a belief to be consistent with the so-called 'the law of small numbers'.
- D. People that have preferences consistent with hyperbolic discounting exhibit consistent choices across time.
- E. The term 'unrealistic optimism' relates to the tendency of people to believe they are able to influence events which in fact are governed mainly, or purely, by chance.

## Question 2: Disposition Effect

- A. Please explain the 'Disposition Effect'. You are encouraged to use a figure to illustrate it.

Suppose an investor's preferences can be explained by Prospect Theory. Suppose further that the investor buys a share of a stock at the price of  $P$ . The stock price is equally likely to drop or rise (by  $x$ ) in each period.

- B. Explain how the investor will evaluate his position after one good year where the price is  $P+x$ .
- C. Explain how the investor will evaluate his position after one bad year where the price is  $P-x$ .

## Question 3: Social preferences

- A. Define the concept of belief-dependent guilt aversion and explain using an example how guilt aversion can mitigate the problem of moral hazard in partnerships.
- B. Give an example of how cooperation can be fostered if agents are motivated by belief-dependent guilt aversion.