Written Exam at the Department of Economics winter 2016-17

**Behavioral Finance**

Final Exam

20-02-2017

(2-hour closed book exam)

**This exam question consists of 3 pages in total (including cover page)**

Please answer all questions as concise and short as possible!

Good Luck!

Question 1

Explain concisely the anchoring heuristic, the potential cognitive mechanism at play when anchoring is used and how it is measured. Furthermore, describe an example highlighting how anchoring influences financial/investment decisions.

Question 2

(2.a) Define ambiguity aversion and give a short example highlighting how ambiguity influences financial decisions.

(2.b) Suppose you have an urn containing 30 red balls and 60 other balls that are either black or yellow. Related to this urn consider the gambles below and explain how people usually choose in the two decision situations. Is this consistent with standard theory? Explain your answer! Lastly, explain how Gilboa and Schmeidler's Maxmin Expected Utility Theory can rationalize the typical experimental behavior we observe in these decision situations.

Decision situation 1:

Gamble A                                              Gamble B

You receive $100 if you draw a red ball              You receive $100 if you draw a black ball


Decision situation 2

Gamble C                                              Gamble D

You receive $100 if you draw a red or yellow ball    You receive $100 if you draw a black or yellow ball


Question 3

Consider the $\{\beta, \delta\}$ – model discussed in the lecture on intertemporal preferences and consider the following situation. Suppose you must write a term paper this weekend, on Friday night, Saturday or Sunday. You know the paper will be better if written either on Saturday or Sunday (when you have an entire day). However, it is in the middle of June 2008 and the quarter-finals of the European Soccer Championship are on TV, Croatia vs Turkey on Friday night, Netherlands vs Russia

on Saturday and Spain vs Italy on Sunday. You are less interested in the match Croatia vs Turkey (but still interested). You prefer to watch the game of the Netherlands or the match of Spain because of their superior midfielders, in particular you love watching Spain's magic four (Iniesta, Xavi, Fabregas, Silva).

Formally, the costs associated with writing the term paper on either of the three days are c = {3; 8; 13}. They are immediate, i.e. they occur on the day you write the paper. The rewards associated with writing the paper on either of the three days are v = {12; 18; 18}. These rewards will only materialize 2 weeks later when you receive the grade, i.e. they are delayed as they will only materialize when you get the grade.

a) Assume that you have self-control problems with $\beta=1/2$, but your long term discount rate $\delta=1$. When will you write the paper in case you are naïve?
b) Now assume that you do not have a self-control problem, i.e. $\beta=1/2$ and $\delta=1$. When will you write the term paper?
c) Intuitively explain the results of part a) and part b). Furthermore, please exemplify the potential consequence of such self-control problems as described under (a) for financial decisions.


## Question 4

Describe the disposition effect, the experimental evidence concerning it as well as possible explanations that we discussed during the course.