

Written Exam for the M.Sc. in Economics, Winter 2010/2011

Behavioral Economics and Finance

Master's Course

20 January 2011

(2-hour, closed book exam)

The exam consists of 3 different questions (with sub-questions). Answer as much as you can.

Good luck.

(1) Heuristics: When people make judgments about the likelihood of uncertain events they use heuristic rules (e.g. Kahneman & Tversky (1972), De Bondt (1993))

(1a) Explain the “representativeness heuristic” and how this is used to explain the “hot-hand”- and “gambler’s”-fallacy.

(1b) The representativeness heuristic influences forecasts of financial risk and return. De Bondt (1993) studies the return expectations and the risk perceptions of financially unsophisticated agents. Explain his analysis and results.

(2) Prospect Theory: Against the background of a lot of experimental evidence at odds with “expected utility theory” Kahneman and Tversky (Econometrica, 1979 and Journal of Risk and Uncertainty, 1992) developed “prospect theory”.

(2a) Explain the difference between “expected utility theory”, “prospect theory” and “cumulative prospect theory”.

(2b) In the original version of prospect theory Kahneman and Tversky (Econometrica, 1979) introduce the assumption of “subcertainty”, “subadditivity” and “subproportionality”. Explain what these assumptions are and why Kahneman and Tversky introduced them.

(3) Behavioral Corporate Finance:

(3a) Baker et al. (2004) describe that when investors are irrational and, hence, mispricings exist in markets, the objective of rational/smart managers extends beyond fundamental value maximization. Explain what other objectives rational investors might have and how they depend on their planning horizon.

(3b) Consider the following problem: there is a company that is debt constrained, i.e. it cannot take on any debt, but it has 400 million DKK in resources that it can either spend on an investment project or to e.g. repurchase stocks. The manager in this company believes that the stock of the company is undervalued by 10%. He has to decide whether to finance a project which costs 400 million DKK and has a net present value of 100 million DKK or use the cash to repurchase shares. What should he do? What is the implicit hurdle rate that an investment project would need to be worth more than repurchasing stocks?