

Question 1 - Judgements

- a) What is a judgement heuristic. Which judgement heuristics did we discuss in this course? Please explain them in detail. Which consequences do they potentially have for financial decision making.

Tentative answer: Heuristic rules are mental short cuts that help us to evaluate the likelihood of uncertain events and uncertain quantities. They are rules of thumb that reduce complexity thus enabling us to come to judgements even in very complex situations. However, they might lead to judgement biases.

We mainly talked about three kinds of heuristics:

- Representativeness: People judge the likelihood of an event on the basis of
 - (i) how similar it is to the stereotype of a parent population. (Linda example could be mentioned here)
 - (ii) how much its features are representative of the overall process by which it was generated. For instance people would judge HHXHXH more likelihood than HHHXXX in the toss of a fair coin because they consider the first more representative of a random process.

The representativeness heuristic might lead to base rate neglect and the conjunction fallacy.

Explanations for these two biases could be given here.

In finance decision based on representativeness might lead to a series of misjudgments (examples should be explained and how they relate to the representativeness heuristic). For example, in one study that we looked at it emerged that people tend to consider a company with a good management a good investment since a good management is considered representative of a good investment even if this cannot be empirically be proven and according to the efficient market hypothesis, all information should be already present in the current price of the firm.

- Availability: People judge the likelihood of an uncertain event on the basis of the ease with which occurrences of this event come to mind. It is a mental sampling technique. Therefore the more available the more it is considered likely.

The availability is influenced by the salience, the recency and the imaginability of occurrences of that event. Concrete examples could be given here that explain this technique. These examples should relate to financial decisions and highlight in how far availability plays a role here.

- **Anchoring:** People start their judgements by unconsciously anchoring to relevant and irrelevant information that is part of their judgement context. The problem is that normally the adjustments from the starting values are not sufficient such that final judgements are influenced by the starting values that people were exposed to. This explanation for the anchoring effect is also called the anchoring and adjust heuristics. The other explanation for the anchoring effect comes from the theory of selective accessibility. This should be explained as well. Examples that are related to financial decisions should be given here.
- b) Explain the gambler's fallacy and why the representativeness heuristic can lead to it. Give a short example highlighting how the gambler's fallacy might influence financial decision making.

Tentative answer: The answer to this question should include all points made on slides 15-19 of lecture 9 and the points in associated readings.

Question 2 – Decision under risk

- a) Explain prospect theory. In doing so please highlight the behavioural regularities it is based upon.

Tentative answer: The answer to this question should include all points made on slides 5-32 of lecture 3 and the points in associated readings: Behavioral Finance: Understanding the Social, Cognitive, and Economic Debates (Chapter 9, "Prospect Theory")

- b) Please explain the equity premium puzzle and how myopic loss aversion might help to explain it?

Tentative answer: The answer to this question should include all points made on slides 3-4, 13-25 of lecture 6 and the points in associated readings: Bernatzi and Thaler (1995), Myopic Loss Aversion and the Equity Premium Puzzle, Quarterly Journal of Economics, 110(1), 73-92

- c) Please explain the disposition effect. Highlight why it implies irrational behaviour on the side of investors. Which parts of prospect theory can explain the disposition effect?

Tentative answer: The answer to this question should include all points made on slides 5-13 of lecture 5 and the points in associated readings.

Question 3 – Behavioural corporate finance

Behavioural corporate finance focuses on explaining financial contracts and real investment behaviour that emerge from the interaction of (i) managers and (ii) investors. It allows for irrationalities and biases on the managers as well as the investors side.

- a) Malmendier & Tate (2005), CEO Overconfidence and Corporate Investment, JFE, 60(6), 2661-2700 analyses managers that are biased. Please describe the focus of their study and their results.

Tentative answer: The answer to this question should include all points made on slides 8-15 of lecture 13 and the points in associated reading: Malmendier & Tate (2005), CEO Overconfidence and Corporate Investment, JFE, 60(6), 2661-2700

- b) In contrast to their study, there is another strand of the literature that assumes that managers are rational and investors are irrational. What are the consequences of investor irrationality and how does this change the objective function of managers? Please describe the three different 'objectives' managers might have in this situation which were discussed in the course?

Tentative answer: The answer to this question should include all points made on slides 17-30 of lecture 13 and the points in associated readings