

Written Exam at the Department of Economics winter 2020-21

Behavioral Finance

Final Exam

16-12-2020

(2-hour open book exam)

Answers only in English.

This exam question consists of 3 pages in total

Falling ill during the exam

If you fall ill during an examination, you must:

- submit a blank exam paper.
- leave the examination.
- contact your GP and submit a medical report to the Faculty of Social Sciences no later than five (5) days from the date of the exam.

Be careful not to cheat at exams!

You cheat at an exam, if during the exam, you:

- Make use of exam aids that are not allowed
- Communicate with or otherwise receive help from other people
- Copy other people's texts without making use of quotation marks and source referencing, so that it may appear to be your own text
- Use the ideas or thoughts of others without making use of source referencing, so it may appear to be your own idea or your thoughts
- Or if you otherwise violate the rules that apply to the exam

Overconfidence

- a) Consider a setting in which an investor's individual demand for a security depends upon her private evaluation of the security. The private evaluation depends on the investor's prior opinion and the market price of the security. Assume that all investors are price takers. Using this setting, formally explain how overconfidence can lead to more trading volume on stock markets / excessive trading. Discuss how the results presented in Glaser and Weber (2007), Overconfidence and Trading Volume, Geneva Risk and Insurance Review, 32(1), 1-36 can be related to this form of overconfidence.

Points to include:

- The question asks to 'formally explain' using the sketched setting. The described setting was used in Lecture 09_10_Overconfidence (slides 19-21). So the answer should include the formalization / explanation that was discussed in connection with these slides.
- It is important to explain why the coefficient ' a ' in this formalization can be interpreted as overconfidence and why a higher ' a ' implies more trading.
- The analysis by Glaser and Weber (2007) is discussed in the same lecture on slides 22-28 and the mandatory reading. Beside describing their analysis it is important to note that they look at miscalibration and the better than average effect. They find evidence on both, but only the better than average effect is correlated with trading behavior. In terms of the formalization this is consistent with the idea that people who think they are better than average traders hang on more to their own prior valuation (i.e. higher a) as compared to the information contained in the market price and react to difference between their own valuations and the market price.

- a) Explain why, in a corporate context, overconfidence creates a relation between investments and firm liquidity. How is this related to the idea of 'market timing'?

Points to include:

- The answer to this question should mention the points discussed in the paper Malmendier, Ulrike, and Geoffrey Tate, 2008, Who makes acquisitions? CEO overconfidence and the market's reaction, Journal of Financial Economics 89(1): 20-43 and slides 8-13 in the lecture 15_Behavioral Corporate Finance_2020
- Their analysis assumes rational investors and irrational managers: the irrational managers approach

- Importantly, Finding 4 and the reasoning behind it (see slide 12 'lecture 15_Behavioral Corporate Finance_2020') needs to be explained.
- The overconfident managers perceive their company to be undervalued and are therefore reluctant to issue shares.
- This is related to the market timing approach in as much as CEOs have an incentive to sell shares of their company (issue equity) whenever they believe that their company is valued higher than 'their belief' regarding the company's fundamental value and buy back shares whenever it is undervalued. This 'market timing' is in the interest of the current shareholders as it transfers wealth from new investors to current owners.

Experimental Asset Markets:

- a) Gneezy, Kapteyn & Potters (in Gneezy, Kapteyn & Potters (2003), Evaluation Periods and Asset Prices in a Market Experiment, *Journal of Finance*, 58(2), 821-837) present an experimental analysis. Below, you find one of the figures that they use to present their results. Please concisely explain the idea of their experiment and the results in the figure. In doing so, please also explain their experimental set-up and how treatments H and L are defined.

830

The Journal of Finance

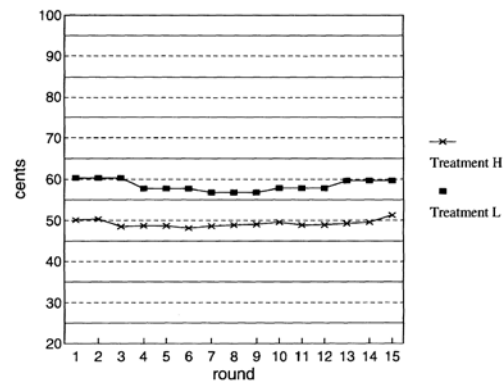


Figure 3. Average prices per round. For each round, asset prices are averaged first over the transactions in a session, then over the five sessions of each treatment.

Points to include:

- The idea of the experiment is to test whether the 'effects' of Myopic Loss Aversion also show up in a competitive market (Gneezy, Kapteyn & Potters (2003))
- The answer should include (i) a description of their experiment and treatments and (ii) an explanation what kind of 'effects' Myopic Loss Aversion predicts in the context of their experiment.

- Lastly, the results shown in the figure should be clearly explained.
- b) Explain the relation between their experimental set-up, their results and the equity premium puzzle. In doing so please clearly explain the equity premium puzzle.

Points to include:

- The results of their experiment are consistent with the idea that people are influenced by Myopic Loss Aversion
- During the course we discussed the equity premium and the puzzle associated with it. The answer should give a clear definition of the equity premium puzzle.
- In order to make the connection between the equity premium puzzle and myopic loss aversion, the answer should discuss the fact that it is difficult to reconcile the historical equity premium with risk aversion alone and that Myopic Loss Aversion can add another additional explanation.

Ambiguity Aversion:

- a) One of the prominent psychological explanations for ambiguity aversion is the ‘fear of negative evaluations’. Explain what ‘fear of negative evaluation’ means, and how it is related to ambiguity aversion. In doing so please also explain ambiguity aversion using the Ellsberg Paradox.

Points to include:

- Points that should be included in this answer can be found on slides 2-9 of the lecture 07_Ambiguity Aversion, the points raised Trautmann, Vieider & Wakker (2008) (“Causes of Ambiguity Aversion: Known Versus Unknown Preferences, Journal of Risk and Uncertainty, 36 , 225-243”) in paragraph 2 (pages 225 – 226) as well as the points made in section I (1 Literature on the fear of negative evaluation).
- b) Explain in detail how the experimental design presented in Trautmann, Vieider & Wakker (2008), Causes of Ambiguity Aversion: Known Versus Unknown Preferences, Journal of Risk and Uncertainty, 36 , 225-243 allows to test for this explanation of ambiguity aversion?

Points to include:

- Trautmann, Vieider & Wakker (2008) present 3 experiments. The important treatment in relation to the question is their main treatment described in section 3 (pp 229-235) of their paper.
- The answer to this question should raise the points described here. Importantly, section 3.1 describes the experimental design. The points raised in this subsection explain how the authors can test for 'fear of negative evaluation' as a psychological explanation for ambiguity aversion.

- c) Briefly explain the reasoning behind Trautmann et al. (2008)'s argument that 'fear of negative evaluation' suggests that the 'Home bias' is a more long term phenomenon in Finance than in Trade. In doing so please explain the 'Home bias'.

Points to include:

- Note: question c) contained a typo. It should have said "Briefly explain the reasoning behind Trautmann et al. (2008)'s argument that 'fear of negative evaluation' suggests that the 'Home bias' is a more long term phenomenon in Trade than in Finance. In doing so please explain the 'Home bias'."
- It clearly refers to paragraph 2 in subsection 5 on page 236
- Given this glitch, we decided that everyone gets full points for this subquestion.