5IE380 Behavioral Finance Study Guide

- Description This course introduces major concepts of behavioral approach to analysis of financial markets. The aim of the course is to shed light on major concepts of behavioral approach such as cognitive biases, individual emotions and other psychological effects, to give a new perspective to market inefficiencies, apply psychologically realistic assumptions and analyze effects of these assumptions. We will highlight inefficiencies such as under or over-reactions to information as causes of market trends and in extreme cases of bubbles and crashes. We also be investigating limited investor attention, overconfidence, overoptimism, mimicry (herding instinct) and noise trading.
- Structure and
 Upon successful completion of this course, students will be able

 objective
 to explain why market participants make irrational systematic errors

 contrary
 to assumption of rational market participants

 to investigate how other participants take advantage of such errors and market
 inefficiencies

- to test market behaviour in an experimental laboratory.

All students are invited to attend weekly lectures. The lectures will:

- present an overview of the key topics in Behavioral Finance
- serve as an opportunity to take part in two laboratory
 experiments
- introduce students to several special guest speakers, experts in the field
- serve as a space for student presentations
- represent a space for discussion

For more information see Course content. Detailed schedule with specific dates reserved for the laboratory experiments will be presented during the first lecture and will be part of the introductory presentation available in InSIS.

Course schedule Every Thursday 18:00 – 19:30, starting 21.9. 2017

Literature Reading list can be found in the section Readings. There are readings for lectures and then list of papers that are to be selected by individual teams for presentations.

Note that there are two types of readings:

- **Compulsory:** Readings that are discussed in the lectures or to be selected by individual teams for presentation and are part of the final exam.
- **Reference:** recommended to students in case they wish to study particular questions in a greater detail; these readings will not be included in the exams.

Course Laboratory experiment attendance (20 pts + up to 5 bonus points)

requirements

Paper presentation (25 pts)

Final examination (55pts)

Besides standard passing criteria (=60% of total points), minimum of 50% of the final exam points is required to pass the course.

Further description is available in the section Course requirements in detail (see page 2).

Course content

- Introduction to Behavioral Finance Rational Expectation Hypothesis, Efficient Market Hypothesis, psychology of decision making [bounded rationality, cognitive biases stemming from a) Heuristics - i.e. representativeness, b) Beliefs - i.e. overconfidence, c) Preferences - i.e prospect theory)], limits to arbitrage
- Aggregate effects on stock markets and market anomalies Equity premium puzzle, volatility puzzle, belief-based models
- 3. Market anomalies II (predictability in returns, herding behavior, calendar effects, etc.) and investor behavior (insufficient diversifivation, naive diversification, excessive trading, etc.)
- 4. Trading Strategies and practice
- 5. Asset Market Bubbles (SSW framework, history of bubbles, "unavoidability" of bubbles, experience, fundamental value etc.)
- Agent Based Computational Finance (i.e. Fundamentalists vs. Chartists, Herd Models, Cusp Catastrophe Model, Adaptive Belief System, Price Endogenity, Excessive Volatility, Wide Distribution Ends, etc.)
- 7. Behavior Corporate Finance (managers cognitive biases, valuation heuristics, capital structure, dividend policy, principal-agent problem, etc.)
- 8. Valuation Theory, economic policy

Course requirements in detail

Laboratory 20 points + up to 5 bonus points

experiment attendance There will be two laboratory experiments, nevertheless for gaining 20 points it is sufficient to attend one. If you attend two, you can get 2x up to 5 bonus points based on your trading score.

Paper 25 points

To train your presentation skills and summarizing the main idea in a clear and comprehensible way, you are asked to deliver a short presentation in the team of two. You will be asked to pick an article from the presented reading list and form the team. Every team will be asked to present selected article to the class, followed by a short discussion with the class. You are expected to throw an approximately 10-15 min presentation and form two questions, based on which you will moderate the discussion with the rest of the class. After asking the questions and moderating the discussion you are expected to provide the class with the complete answers. There is no specific time limit for the discussion. Please submit your presentation 2 days ahead of the date you are expected to present it to <u>dvorakova.lenka@outlook.com</u>. **Each member of the team is graded individually.**

Bonus points 5 points per laboratory experiment

According to your score after the experiment, you can gain up to 5 bonus points per laboratory experiment. These bonus points improve your chance for high overall evaluation since they are not formally included in the maximum 100 points.

Final exam 55 points

The course is wrapped up by a written final exam, consisting of two parts – **multiple choice questions** focused on the material discussed during the lectures and **open questions** based on the presented papers. Both parts are closed book. You need to score at **least 50% from the final exam** to pass the course.

Readings

For the lectures:

Required:

ARBERIS, Nicholas C., and Richard H. THALER, 2003. A survey of behavioral finance. In: George M. CONSTANTINIDES, Milton HARRIS, and René M. STULZ, eds. Handbook of the Economics of Finance: Volume 1B, Financial Markets and Asset Pricing. Elsevier North Holland, Chapter 18, pp. 1053–1128.

Recommended:

De BONDT, Werner F. M., and Richard THALER, 1985. Does the stock market overreact? The Journal of Finance, 40(3), 793–805.

FAMA, Eugene F., 1998. Market efficiency, long-term returns, and behavioral finance. Journal of Financial Economics, 49(3), 283–306.

FESTINGER, Leon, Henry W. RIECKEN, and Stanley SCHACHTER, 1956. When Prophecy Fails. Minneapolis: University of Minnesota Press.

KAHNEMAN, Daniel, Paul SLOVIC, and Amos TVERSKY, eds., 1982. Judgment Under Uncertainty: Heuristics and Biases. Cambridge University Press.

KAHNEMAN, Daniel, and Amos TVERSKY, 1979. Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263–292.

KAHNEMAN, Daniel, and Amos TVERSKY, 2000. Choices, Values, and Frames. Cambridge University Press.

TVERSKY, Amos, and Daniel KAHNEMAN, 1974. Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124–1131.

TVERSKY, Amos, and Daniel KAHNEMAN, 1981. The framing of decisions and the psychology of choice. Science, 211(4481), 453–458.

TVERSKY, Amos, and Daniel KAHNEMAN, 1992. Advances in prospect theory: Cumulative representation of uncertainty. Journal of Risk and Uncertainty, 5(4), 297–323.

Papers for the presentation

Link to the online table with the opportunity to register to a specific date and paper will be sent out to you in the 2nd week of the semester. Suggested papers are:

- BRAD M. BARBER AND TERRANCE ODEAN (2001): Boys will be boys: Gender, overconfidence and common stock investment
- <u>RICHARD THALER (1999): Mental accounting matters</u>
- JEFFREY WURGLER, EKATERINA ZHURAVSKAYA (2011): Does Arbitrage Flatten
 Demand Curves for Stocks?
- WERNER F.M. DE BONDT, RICHARD THALER (1985): Does the stock market overreact?
- <u>NARASIMHAN JEGADEESH and SHERIDAN TITMAN (1993): Returns to Buying Winners</u>
 <u>and Selling Losers: Implications for Stock Market Efficiency</u>
- <u>SMITH, SUCHANEK, WILLIAMS (1988): Bubbles, Crashes, and Endogenous</u>
 <u>Expectations in Experimental Spot Asset Markets</u>
- BRUNNERMEIER AND NAGEL (2004): Hedge Funds and the Technology Bubble
- <u>GAOFENG ZOU et al (2017): Investor Sentiment and IPOs Anomalies: An Agent-Based</u>
 <u>Computational Finance</u>

- DAVID HIRSHLEIFER, SONYA SEONGYEON LIM, and SIEW HONG TEOH (2009): Driven
 to Distraction: Extraneous Events and Underreaction to Earnings News
- <u>ALEX EDMANS, DIEGO GARCIA, and ØYVIND NORLI (2007): Sports Sentiment and</u>
 <u>Stock Returns</u>

Contact

In case of any question please do not hesitate to drop an email to <u>dvorakova.lenka@outlook.com</u>.



EVROPSKÁ UNIE Evropské strukturální a investiční fondy Operační program Výzkum, vývoj a vzdělávání

