

Institut für Volkswirtschaftslehre
- Geld, Währung und Internationale Finanzmärkte –
Prof. Dr. Thomas Lux

MA-Seminar in Financial Economics

Master's Programmes: Economics, Quantitative Economics, Quantitative Finance, BWL mit WPF VWL (PO 2007), Finanzmathematik

The seminar will cover a range of topics around the central theme of behavioral modelling of financial markets. The seminar will run as a 4-6 (half) day course during the summer term 2021. Students register via the central seminar registration group on OLAT ("Seminar Registration MA-VWL").

The submission deadline for the seminar paper is May 25th, 2021. A kick-off meeting will be held *online* using Zoom on February 10th, 2021 at 11 a.m. to fix dates for the seminar presentations. The Zoom credentials can be found in the OLAT course.

Students are required to write a seminar paper (15 pages) and to present this paper, consisting of an oral presentation of 30 minutes on their chosen topic and 5 minutes discussion of another topic, which will be randomly assigned. Successful participation is rewarded with 5 ECTS.

Note that according to current regulations, students can only receive credits for seminars within the same category (here: Financial Economics) if the seminars have different registration numbers!

1. Noise Traders and the Limits to Arbitrage

DeLong, J. et al. (1991). The Survival of Noise Traders in Financial Markets, *Journal of Business*, 64 (1), 1-19.

Bhushan, R., Brown, D. P., & Mello, A. S. (1997). Do noise traders "create their own space?". *Journal of Financial and Quantitative Analysis*, 32 (1), 25-45.

Shleifer, A. and Vishny, R. (1997). The limits of arbitrage, *Journal of Finance*, 52 (1), 35-55.

2. Herd Behavior, Collective Opinion Formation and the Dynamics of Financial Markets

Scharfstein, D. S., & Stein, J. C. (1990). Herd behavior and investment. *American Economic Review*, 80 (3), 465-479.

Hirshleifer, D. (2001). Investor psychology and asset pricing. *Journal of Finance*, 56 (4), 1533-1597.

3. Selection Mechanisms and the Survival of Irrational Traders

Benos, A. V. (1998). Aggressiveness and survival of overconfident traders. *Journal of Financial Markets*, 1 (3-4), 353-383.

Hirshleifer, D., & Luo, G. Y. (2001). On the survival of overconfident traders in a competitive securities market. *Journal of Financial Markets*, 4 (1), 73-84.

Gervais, S., & Odean, T. (2001). Learning to be overconfident. *Review of Financial Studies*, 14 (1), 1-27.

4. Simple Models of Speculative Dynamics

Chiarella, C. (1992). The dynamics of speculative behavior. *Annals of Operations Research*, 37, 101-123.

Day, R. H. & Huang, W. (1990). Bulls, bears and market sheep. *Journal of Economic Behavior and Organization*, 14 (3), 299-329.

Kim, G. R., & Markowitz, H. M. (1989). Investment rules, margin, and market volatility. *Journal of Portfolio Management*, 16 (1), 45.

5. Switching between Strategies and Complex Financial Dynamics

Boswijk, H. P., Hommes, C., and Manzan, S. (2007). Behavioral heterogeneity in stock prices. *Journal of Economic Dynamics and Control*, 31 (6), 1938-1970.

Gaunersdorfer, A. (2000). Endogenous fluctuations in a simple asset pricing model with heterogeneous agents. *Journal of Economic Dynamics and Control*, 24 (5), 799-831.

Frijns, B., Lehnert, T., & Zwinkels, R. C. (2010). Behavioral heterogeneity in the option market. *Journal of Economic Dynamics and Control*, 34 (11), 2273-2287.

6. Experimental Asset Markets, Bubbles and Crashes

Smith, V. L., Suchanek, G. L., & Williams, A. W. (1988). Bubbles, crashes, and endogenous expectations in experimental spot asset markets. *Econometrica*, 56 (5), 1119-1151.

Porter, D. P., & Smith, V. L. (2003). Stock market bubbles in the laboratory. *Journal of Behavioral Finance*, 4 (1), 7-20.

Caginalp, G., Porter, D., & Smith, V. (2001). Financial bubbles: Excess cash, momentum, and incomplete information. *Journal of Psychology and Financial Markets*, 2 (2), 80-99.

7. Artificial Markets: Financial Markets with Artificially Intelligent Traders

Chen, S. H., & Yeh, C. H. (2001). Evolving traders and the business school with genetic programming: A new architecture of the agent-based artificial stock market. *Journal of Economic Dynamics and Control*, 25 (3-4), 363-393.

Chen, S. H., & Yeh, C. H. (2002). On the emergent properties of artificial stock markets: the efficient market hypothesis and the rational expectations hypothesis. *Journal of Economic Behavior & Organization*, 49 (2), 217-239.

LeBaron, B., Arthur, W. B., & Palmer, R. (1999). Time series properties of an artificial stock market. *Journal of Economic Dynamics and control*, 23 (9-10), 1487-1516.

Joshi, S., Parker, J., & Bedau, M. A. (2002). Financial markets can be at sub-optimal equilibria. *Computational economics*, 19 (1), 5-23.

8. Behavioral Models for High-Frequency Trading

McGroarty, F. et al. (2019). High frequency trading strategies, market fragility and price spikes: an agent based model perspective, *Annals of Operations Research*, 282, 217-244.

Oriol, N. and Veryzhenko I. (2019). Market structure or traders' behavior? An assessment of ash crash phenomena and their regulation based on a multi-agent simulation, *Quantitative Finance*, 19 (7), 1075-1092.

Karvik, Geir-Are & Noss, Joseph & Worlidge, Jack & Beale, Daniel (2018). The deeds of speed: an agent-based model of market liquidity and flash episodes, *Bank of England Working Paper*, 743.

9. Evaluation of Regulations via Behavioral Models

Pellizzari, P., & Westerhoff, F. (2009). Some effects of transaction taxes under different microstructures. *Journal of Economic Behavior & Organization*, 72(3), 850-863.

Veryzhenko, I., Harb, E., Louhichi, W., & Oriol, N. (2017). The impact of the French financial transaction tax on HFT activities and market quality. *Economic Modelling*, 67, 307-315.

Demary, Markus (2010). Transaction taxes and traders with heterogeneous investment horizons in an agent-based financial market model, *Economics - The Open-Access, Open-Assessment E-Journal*, 4, 1-44

10. Socio-Economic Responses to and Macroeconomic Consequences of the COVID Health Crisis

Eichenbaum, M., Rebelo, S. T., & Trabandt, M. (2020). The macroeconomics of epidemics. *NBER Working Paper*, 26882.

Block, P. et al. (2020). Social Network-Based Distancing Strategies to Flatten the COVID-19 Curve in a Post-Lockdown World. *Nature Human Behavior*, 4, 588-596.

Pedro, S. et al. (2020), Conditions for second wave of COVID-19 due to interactions between disease dynamics and social processes, *Frontiers in Physics*, 8, 428.

Supervisor for topics 1-6: Clemens Knoppe, MSc (knoppe@economics.uni-kiel.de)

Supervisor for topics 7-10: Lutz Honvehlmann, MSc (honvehlmann@economics.uni-kiel.de)