

Seminar in Financial Markets

HWS 2023

Chair of Finance – Prof. Dr. Erik Theissen



Seminar Topics

- Presentation is downloadable on our website:

<https://www.bwl.uni-mannheim.de/en/theissen/teaching/master-courses/seminars/>

Chair of Finance

- **Address:**
 - L 9, 1-2
 - Secretary: third floor (“3. OG”)
 - Assistants: second, fourth, and fifth floor
- **Office hours:**
 - By appointment
 - General questions: Please visit our homepage first
- **Research:**
 - Market Microstructure
 - Empirical Asset Pricing
 - Blockchain & Cryptocurrency

Assignment of Seminar Topics

- **Prerequisites:**
 - Please note that CC 502 Applied Econometrics is a prerequisite.
 - You must have successfully completed one core course (FIN 5XX) from the Area “Banking, Finance, and Insurance”.
 - Please note that a FIN 6XX course is not (!) enough.
- The assignment of topics is carried out jointly by the chairs of the Area “Banking, Finance, and Insurance”.
- Assignment of topics will be based on your grades in the Area “Banking, Finance, and Insurance” and your priority list.

Time Schedule

- **Application period:**
 - Thursday, 01.06.2023 – Thursday, 15.06.2023
- **Topics Allocation Announcement and Starting Date:**
 - Tuesday, 27.06.2023
- **Submission deadline:**
 - Tuesday, 22.08.2023 (8 weeks)
- **Seminar presentations**
 - Thursday, 07.09.2023 + Friday, 08.09.2023 (in person)

FIN 604 – Stata in Finance

- Short crash course on how to write an empirical paper using Stata and the databases offered at the University of Mannheim
- **Next date:**
 - Monday, 26.06.2023 – Thursday, 29.06.2023
- **Registration:**
 - For participation in class, please join the Ilias group. To participate in the exam, in addition registration for the exam in Portal2 is necessary.
- **Further information is available under the following link:**
<https://www.bwl.uni-mannheim.de/theissen/lehre/masterlehre/fin-604-stata-in-finance/>

Guide to Scientific Writing

- An information sheet on writing a seminar paper or a master thesis is provided on our website:

https://www.bwl.uni-mannheim.de/media/Lehrstuehle/bwl/Theissen/Lehre/Guidelines_Mastert_hesis_2022.pdf/flipbook

- **Use of ChatGPT:**
 - We are open to the use of AI tools like ChatGPT. However, it is important to understand the benefits and potential pitfalls of utilizing ChatGPT as a tool for thesis writing.
- **Please feel free to use ChatGPT**
 - to generate ideas,
 - to assist you with writing code,
 - to proofread your thesis and to check the tone of your writing style,
 - and to improve clarity and coherence of your arguments.
- **However, you might NOT want**
 - to write entire paragraphs of your thesis with AI (if ChatGPT plagiarizes, you are held accountable),
 - to overly rely on AI (you need to understand the literature to critically discuss your own results),
 - or to blindly trust the information provided by AI (there are instance of ChatGPT hallucinating and making things up – your supervisor will notice).

Important Remarks

- **Plagiarism policy:**
 - Your seminar thesis will be analyzed by plagiarism detection software (Turnitin).
 - Our chair has a **zero-tolerance policy** regarding plagiarism.
 - Students who submit plagiarized work will be graded with 5.0.
- **Language quality:**
 - Grading of your seminar thesis takes also into account the language quality.
 - Linguistic shortcomings negatively impacts your final grade.
 - You might want to use tools like Grammarly or ChatGPT to check your writing.
 - The seminar thesis can be either written in English or German.
- **Literature in foreign languages:**
 - Please only include literature that is written either in English or German.

- **Disclaimer:**

- You are responsible for your data. It can always happen that your computer breaks down, is stolen, or damaged in any other way. However, you are responsible for having a backup of your thesis and your progress. Please make sure that you have enough backups. There will be no extensions of the deadline. (Even if we were willing to grant you an extension of the deadline, we are not allowed to.)

- **Backups:**

- Mail
- Dropbox
- USB drive/external hard drive
- Cloud
- ...

Questions ???

T1. Seasonal Variation in Liquidity

Erik Theissen

Topic Description

- Kamstra et al. (2023) find that there is systematic variation of market liquidity over the year. They argue that this is because systematic variation in risk aversion related to the time variation in seasonal affective disorder (which, in turn, is related to the variation of daylight hours over the year).
- The objective of this paper is to analyze empirically whether seasonal variation in measures of market activity also exists in Germany. (Note that I do not expect you to measure incidences of seasonal affective disorder).

Requirements

The empirical work requires the use of large databases (i.e. the market microstructure data base Xetra). The data base is readily accessible for affiliates of the University of Mannheim. The candidate should feel comfortable in the use of a statistical software program (such as STATA or R) and econometric methods.

T1. Seasonal Variation in Liquidity

Erik Theissen

Starting References

- Kamstra, M., L. Kramer and A. Shkilko (2023): Traces of Humanity: Liquidity and Human Behavior in the Machine Age. Working Paper.

T2. Pricing Model for Cryptocurrencies

Yanghua Shi

Topic Description

- Many papers have investigated cryptocurrency pricing, in particular, with the tools used in the traditional financial markets.
- The seminar paper aims to comprehensively and critically reviewing and evaluating the existing literature in this area.
- The seminar paper aims to replicate the result from Shen, Urquhart, and Wang (2020).
- Analysis should also be extended based on existing literature or by e.g. looking at periods after major regulatory changes.
 - Alternative data sources may be used

Requirements

The empirical work requires the use of large databases on cryptocurrency market data. The candidate should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

T2. Pricing Model for Cryptocurrencies

Yanghua Shi

Starting References

- Alexander, Carol, and Michael Dakos. "A critical investigation of cryptocurrency data and analysis." *Quantitative Finance* 20.2 (2020): 173-188.
- Bhambhwani, Siddharth, Stefanos Delikouras, and George M. Korniotis. *Do fundamentals drive cryptocurrency prices?*. Centre for Economic Policy Research, 2019.
- Gregoriou, Andros. "Cryptocurrencies and asset pricing." *Applied Economics Letters* 26.12 (2019): 995-998.
- Liu, Weiyi, Xuan Liang, and Guowei Cui. "Common risk factors in the returns on cryptocurrencies." *Economic Modelling* 86 (2020): 299-305.
- Liu, Yukun, Aleh Tsyvinski, and Xi Wu. "Common risk factors in cryptocurrency." *The Journal of Finance* 77.2 (2022): 1133-1177.
- Shen, Dehua, Andrew Urquhart, and Pengfei Wang. "A three-factor pricing model for cryptocurrencies." *Finance Research Letters* 34 (2020): 101248.
- Shahzad, Syed Jawad Hussain, et al. "The pricing of bad contagion in cryptocurrencies: A four-factor pricing model." *Finance Research Letters* 41 (2021): 101797.
- Sovbetov, Yhlas. "Factors influencing cryptocurrency prices: Evidence from bitcoin, ethereum, dash, litcoin, and monero." *Journal of Economics and Financial Analysis* 2.2 (2018): 1-27.
- <https://www.royalton-crix.com/>

T3. IPOs and Characteristic-Based Benchmark Returns

Mengnan Wu

Topic Description

- Underpricing of initial public offerings (IPOs) and the subsequent long-term reversal in returns are widely studied anomalies in the literature on financial economics. Empirical evidence on the share issuers' underperformance in the long run is not consistent when different approaches are implemented (Bessembinder and Zhang, 2013). Previous literature has identified a number of firm characteristics that have significant explanatory power for the cross-section of stock returns in the US. Bessembinder and Zhang (2019) finds that firm characteristics provide benchmarks to assess whether the returns following certain corporate events are abnormal with a C14 model.
- The task of the thesis is 1) to test whether post-IPO returns are abnormal in the long term with the BHAR approach, and then 2) to evaluate the stock returns following IPOs with the characteristic-based benchmark proposed by Bessembinder and Zhang (2019).
- The empirical work requires the use of large databases (i.e. Refinitiv Eikon). The candidate should feel comfortable in the use of Stata and econometric methods.

T3. IPOs and Characteristic-Based Benchmark Returns

Mengnan Wu



Starting References

- Bessembinder, H., Cooper, M. J., & Zhang, F. (2019). Characteristic-based benchmark returns and corporate events. *The Review of Financial Studies*, 32(1), 75-125.
- Bessembinder, H., & Zhang, F. (2013). Firm characteristics and long-run stock returns after corporate events. *Journal of Financial Economics*, 109(1), 83-102.
- Loughran, T. (2021). Reconsidering equity issue performance: A focused criticism of the Fama-French factor models. Available at SSRN 3907523.
- Gandolfi, G., Regalli, M., Soana, M. G., & Arcuri, M. C. (2018). Underpricing and long-term performance of IPOs: Evidence from European intermediary-oriented markets. *Economics, Management & Financial Markets*, 13(3).

T4. Saliency Theory and Stock Prices

Büsra Eroglu

Topic Description

- Individuals allocate limited attention to the set of information, which can lead to biased forecasts and incorrect beliefs due to selective attention (Schwartzstein, 2014).
- Saliency Theory says the most different option in the set of alternatives attracts attention, and this salient outcome is overweighted relative to their objective probability (Bordalo, Gennaioli & Shleifer, 2012).
- In a financial market context, the stock returns that differ most from the average market return are called salient. Investors are attracted to stocks with salient upsides, which are overvalued and earn subsequent low returns. The implication of the theory in the financial market has been tested by various studies.
- This seminar thesis aims to investigate the theory empirically. The student is expected to review the literature on the saliency effect on the financial market and replicate the main findings of Cosmans & Frehen, 2021.

Requirements

The empirical work requires the use of large databases (i.e. CRSP). The databases are readily accessible for affiliates of the University of Mannheim. The candidate should feel comfortable in the use of a statistical software program (such as STATA, R) and econometric methods.

T4. Salience Theory and Stock Prices

Büsra Eroglu

Starting References

Theoretical

- Bordalo, P., N. Gennaioli, & A. Shleifer, 2012, Salience theory of choice under risk, Quarterly Journal of Economics 127, 1243-1285.
- Bordalo, P., N. Gennaioli, & A. Shleifer, 2013, Salience and asset prices, American Economic Review: Papers & Proceedings 103, 623-628.

Empirical

- Cakici, N. & A. Zaremba, 2021, Salience theory and the cross-section of stock returns: International and further evidence, Journal of Financial Economics, 146, 689-725.
- Cosemans, M., & R. Frehen, 2021, Salience theory and stock prices: empirical evidence, Journal of Financial Economics 140(2), 460-483.

T5. Voluntary Carbon Offset Tokens (1x)

Stefan Scharnowski

Topic Description

- Reducing the extent and impact of climate change may be the biggest challenge of our time. One way of addressing excessive carbon emissions can be found in putting a price tag on CO2 emissions and creating a market for emission allowances. Beyond government-mandated emission restrictions and carbon certificate trading, individuals or companies can voluntarily offset their carbon emissions.
- Blockchains facilitate decentralized trading. Real or financial assets can be put on a blockchain through the process of tokenization. While still young, there exists a market for carbon credit tokens that can be traded on a blockchain and allows individuals to offset their carbon emissions by investing in projects that reduce emissions elsewhere.
- The aim of this thesis is to construct and empirically analyze a dataset on a blockchain-based carbon market. This topic thus allows students to get insights into important questions from the areas of FinTech and Climate Finance.

Requirements

The candidate should feel comfortable in the use of a statistical software program (such as Stata) and econometric methods.

T5. Voluntary Carbon Offset Tokens (1x)

Stefan Scharnowski

Starting References

- <https://trade.aircarbon.co/explore>
- Swinkels, L. (2023). Trading Carbon Credit Tokens on the Blockchain. Working Paper. <https://doi.org/10.2139/ssrn.4378871>
- Benedetti, H., & Rodríguez-Garnica, G. (2023). Tokenized Assets and Securities. In *The Emerald Handbook on Cryptoassets: Investment Opportunities and Challenges* (pp. 107–121). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80455-320-620221008>
- Malinova, K., & Park, A. (2023). Tokenized Stocks for Trading and Capital Raising. *Working Paper*, 1–59. <https://doi.org/10.2139/ssrn.4365241>
- Sazandrishvili, G. (2020). Asset tokenization in plain English. *Journal of Corporate Accounting and Finance*, 31(2), 68–73. <https://doi.org/10.1002/jcaf.22432>
- Franke, L., Schletz, M., & Salomo, S. (2020). Designing a blockchain model for the paris agreement’s carbon market mechanism. *Sustainability*, 12(3), 1068. <https://doi.org/10.3390/su12031068>
- Chen, S., Marbouh, D., Moore, S., & Stern, K. (2021). Voluntary Carbon Offsets: an empirical market study. Working Paper. <http://dx.doi.org/10.2139/ssrn.3981914>

T6. Privacy Coins (1x)

Stefan Scharnowski

Topic Description

- While cryptocurrencies such as Bitcoin have been used for illicit purposes pretty much since their inception, the transparency of their blockchains makes tracking money flows relatively easy.
- Privacy coins address this “shortcoming” by introducing mechanisms to conceal the movement of funds, for example by using advanced cryptographic concepts such as zero-knowledge proofs or ring signatures. At a market capitalization of about USD 6bn as of May 2023, these privacy coins have become popular, especially for criminal activity (money laundering, terrorism, drugs, ...).
- The aim of this thesis is to empirically examine the (relative) pricing of and trading activity in privacy coins. This topic thus allows students to get insights into important questions from the area of Decentralized Finance (DeFi).

Requirements

The candidate should feel comfortable in the use of a statistical software program (such as Stata) and econometric methods.

T6. Privacy Coins (1x)

Stefan Scharnowski

Starting References

- Sapkota, N., & Grobys, K. (2021). Asset market equilibria in cryptocurrency markets: Evidence from a study of privacy and non-privacy coins. *Journal of International Financial Markets, Institutions and Money*, 74, 101402. <https://doi.org/10.1016/j.intfin.2021.101402>
- Hilmola, O. P. (2021). On prices of privacy coins and Bitcoin. *Journal of Risk and Financial Management*, 14(8), 361. <https://doi.org/10.3390/jrfm14080361>
- Genkin, D., Papadopoulos, D., & Papamanthou, C. (2018). Privacy in decentralized cryptocurrencies. *Communications of the ACM*, 61(6), 78-88. <https://dl.acm.org/doi/fullHtml/10.1145/3132696>