Master Thesis Topics FSS 2025



Chair of Finance – Prof. Dr. Erik Theissen





Chair of Finance



• Address:

- L9, 1-2
- Secretary: third floor ("3. OG")
- Assistants: second and fourth floor

• Office hours:

- By appointment
- General questions: please visit our homepage first
- Questions about specific topics: please feel free to contact the respective supervisor

• Research at the Chair of Finance

- a) Market Microstructure
- b) Empirical Asset Pricing
- c) Blockchain & Cryptocurrency







• **Prerequisite:** You must have successfully completed one seminar of the area "Banking, Finance, and Insurance" (Prof. Maug, Prof. Niessen-Ruenzi, Prof. Ruenzi, Prof. Spalt, Prof. Theissen).

• The assignment of topics is carried out jointly by the finance area.

• Assignment to the topics will be based on your priority list and the grade in the respective seminar.



Time Schedule



- Application period: Thursday, 06.03.2025 Friday, 14.03.2025
- **Topics Allocation Announcement:** Tuesday, 18.03.2025
- **Registration Period:** Wednesday, 19.03.2025 Wednesday, 26.03.2025
- Starting Date: Wednesday, 19.03.2025
- Colloquium: Friday, 06.06.2025 (in-person)
- Submission Deadline: Wednesday, 06.08.2025



Guide to Scientific Writing



• An information sheet on writing a seminar paper or a master thesis is provided on our website.

• Most important rules:

- Your thesis should be 45 pages (+/- 10%).
- 50 pages is the absolute maximum.
- Tables and figures have to be included in the text (and count towards the page restriction).
- Only supplementary material that is not needed to read and understand the thesis may be collected in an appendix.
- Please only include literature that is either in English or German.



Important Remarks



• Plagiarism policy:

- Your master 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 master thesis takes also into account the language quality.
- Linguistic shortcomings negatively impact your final grade.
- The master thesis can be either written in English or German.







• Some topics look more difficult than others. Why should I choose a rather difficult topic?

We take the difficulty of the topic into account when grading your thesis.

• Can I do an internship during the writing process?

We generally advise against doing an internship during the writing process.

• My computer crashed and I lost all my progress on the thesis. Can I get an extension of the deadline?

No, you are responsible to make enough backups of your work.

• Can I submit earlier?

Yes.



Master Thesis Topics



- If you have any questions regarding one of the topics before applying for topics, please feel free to contact the respective supervisor!
- You can find contact information for each supervisor on the website of the Chair of Finance

https://www.bwl.uni-mannheim.de/en/theissen/team/



T1. Decomposing the Size Effect Prof. Dr. Erik Theissen



Topic Description

- The size effect, well known since the 1980s, is the observations that firms with high market capitalization (market value of equity) have lower returns.
- The market value of a firm's equity is the number of shares outstanding multiplied by the share price. This raises the question which of these components contribute how much to the size effect.
- The task of this Master thesis is to a) provide a brief review of the size effect and to b) perform an empirical analysis (using U.S. data) to uncover the relative importance of share price and number of shares outstanding for the size effect.

Requirements:

The candidate should feel comfortable in the use of appropriate software (such as STATA or Python) and econometric methods, and should be able to handle large data sets.



T1. Decomposing the Size Effect Prof. Dr. Erik Theissen



- Alquist, R., R. Israel and T. Moskowitz (2018): Fact, Fiction and the Size Effect. Journal of Portfolio Management Fall 2018, 3-30.
 Downloadable at: https://www.aqr.com/Insights/Research/Journal-Article/Fact-Fiction-andthe-Size-Effect
- Ball, R., J. Gerakos, J. Linnainmaa and V. Nikolaev (2020): Earnings, Retained Earnings, and Book-to-Market in the Cross-Section of Expected Returns. Jour-nal of Financial Economics135, 231-154.



T2. The Impact of Salient Fund Returns on Mutual Fund Flow Dynamics Büşra Eroğlu



Topic Description

- Cognitive constraints in information processing, like limited attention, play a key role in shaping trading behavior. Investors tend to focus on stocks that grab their attention, like those making headlines, showing abnormal trading activity, or experiencing extreme returns (Barber & Odean, 2008).
- Salience Theory states that the standout option among a set of alternatives captures attention, and this salient outcome is overweighted relative to its objective probability.
- In the context of financial markets, asset returns that differ most from the average market return are considered salient. Investors are drawn to stocks with salient upsides, which tend to be overvalued and subsequently yield lower returns. Similar patterns are observed in mutual funds. Mutual funds with more upside salient returns attract higher inflows, while those with more downside salient returns experience outflows.
- The aim of this thesis is twofold: (1) to conduct a comprehensive literature review on the salience effect in financial markets and (2) to replicate the empirical study by Hu et al. (2023) in the US mutual funds market.

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 (i.e. STATA, Python) and econometric methods.



T2. The Impact of Salient Fund Returns on Mutual Fund Flow Dynamics Büşra Eroğlu



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.
- Hu, S., Xiang, C., & Quan, X., 2023, Salience theory and mutual fund flows: Empirical evidence from China, Emerging Markets Review 54.

For further questions, e-mail me at buesra.eroglu@uni-mannheim.de



T3. How Long Do Investors Stay? Analyzing Mutual Fund Investors Holding Periods and Their Implications



Hongting Jiang

Topic Description

- Mutual fund holding periods—the average duration investors retain their shares—reflect investor behaviour and fund characteristics. Some investors stay for the long haul, while others jump in and out quickly. Understanding these dynamics is critical for assessing fund liquidity risks and performance.
- Prior research highlights that unpredictable investor flows can lead to higher costs and greater challenges in managing liquidity for mutual funds. However, while investor inflows and outflows are intrinsically linked to holding periods, most studies on mutual fund flows focus on the reasons and immediate effects of flows, while the broader, more stable trends in how long investors typically stay in a fund remain relatively unexplored.
- Using redemption data from regulatory filings (e.g., N-PORT/N-SAR), the thesis will empirically estimate investors holding periods and test their implications in the US market. This thesis aims to fill in the research gaps by examining the variation in investor holding periods across funds with different characteristics (e.g., size, fees, investment style) and exploring how these holding periods relate to fund performance or liquidity risk. As an extension, the thesis may explore differences in holding periods across share classes to uncover how investor clientele heterogeneity influences fund dynamics, offering additional insights into the investment horizons for different investor types.

Requirements

The empirical work requires the use of large databases (i.e. CRSP, Thomson Reuters) 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) and econometric methods.



T3. How Long Do Investors Stay? Analyzing Mutual Fund Investors Holding Periods and Their Implications Hongting Jiang



- Atkins, Allen B., and Edward A. Dyl. "Transactions costs and holding periods for common stocks." The Journal of Finance 52, no. 1 (1997): 309-325.
- Edelen, Roger M. "Investor flows and the assessed performance of open-end mutual funds." Journal of Financial Economics 53, no. 3 (1999): 439-466.
- Greene, Jason T., Charles W. Hodges, and David A. Rakowski. "Daily mutual fund flows and redemption policies." Journal of Banking & Finance 31, no. 12 (2007): 3822-3842.
- Lan, Chunhua, Fabio Moneta, and Russ Wermers. "Holding horizon: a new measure of active investment management." Journal of Financial and Quantitative Analysis 59, no. 4 (2024): 1471-1515.
- Rakowski, David. "Fund flow volatility and performance." Journal of Financial and Quantitative Analysis 45, no. 1 (2010): 223-237.



T4. Can Large Language Models Forecast Stock Price Movements?



Thomas Johann

Topic Description

- Since is introduction in November 2022, ChatGPT and other Large Language Models (LLMs) have firmly established themselves in everyday life with a wide range of applications.
- Some researchers have collected its potentials in Finance (see Chen et al. (2023), Korinek (2023) and Zhao et al. (2024))
- Among other things, LLMs might be useful for making stock market (Deng et al. (2024), Guo/Hauptmann (2024) and Lopez-Lira/Tang (2023)) or earnings (Kim et al. (2024)) predictions.
- The aim of this thesis is twofold:
 - First, the thesis should provide a thorough literature review, structuring and evaluation of the existing papers on the use of LLMs in stock market prediction.
 - Second, the thesis should empirically evaluate whether it is possible to generate meaningful earnings/stock price forecasts by LLMs.
- Since this is a relatively novel research question, this thesis is especially suited for those wanting to conduct original research.
- Some prior experience in working empirically (R, or Python) would be highly advisable.



T4. Can Large Language Models Forecast Stock Price Movements?



Thomas Johann

- Chen, B., Wu, Z., & Zhao, R. (2023). From fiction to fact: the growing role of generative AI in business and finance. *Journal of Chinese Economic and Business Studies*, *21*(4), 471–496.
- Deng, Y., He, X., Hu, J., & Yiu, S. M. (2024). Enhancing few-shot stock trend prediction with large language models. Working Paper.
- Guo, Tian, and Emmanuel Hauptmann (2024). Fine-tuning large language models for stock return prediction using newsflow. Working Paper.
- Kim, Alex, Maximilian Muhn, and Valeri Nikolaev (2024). Financial statement analysis with large language models. Working Paper.
- Korinek, Anton (2023). Generative AI for economic research: Use cases and implications for economists. *Journal of Economic Literature* 61.4 (2023): 1281-1317.
- Lopez-Lira, Alejandro, and Yuehua Tang (2023). Can chatgpt forecast stock price movements? return predictability and large language models. Working Paper.
- Zhao, Huaqin, et al. (2024). Revolutionizing Finance with LLMs: An overview of applications and insights. Working Paper.





Topic Description

- Differentiating informed trading from uninformed trading provides great value, especially when it comes to insiders. For researchers, the separation provides measures for information asymmetry and firm governance. It also allows regulators to effectively monitor illegal insider trading. And for asset managers, it offers grounds for profitable trading strategies.
- Cohen et al. (2012) provide a simple but powerful method by separating US corporate insiders (or insider trades) into 'routine' and 'opportunistic' ones based on historical patterns. When an insiders has consecutively purchased company shares in a particular month for multiple years, the next purchase in the same month by that insider is routine. Whereas an insider trade that falls outside that historical pattern is opportunistic.
- From late 2000s, US insiders start to adopt 10b5-1 plans. Those plans are contracts between insiders and third-parties (such as brokers like JP Morgen), and they typically specify details such how much, how and when company stocks are traded. The proliferation of 10b5-1 planned trades therefore induce ambiguity to the identification strategy in Cohen et al. (2012) are 10b5-1 planned trades **routine**, **opportunistic**, or they can be both? And what about the rest of non 10b5-1 planned trades?
- This master thesis aims to: 1) review the literature on the information content of insider trading, 2) extend the elementary analysis in Cohen et al. (2012) to a more recent period, and 3) analyze 10b5-1 planned trades versus non-planned trades.

Requirements

The empirical work requires the use of large databases (i.e. <CRSP, Layline Dataverse>). 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) and econometric methods. An elementary level of text analysis will be helpful.





- Cohen, L., Malloy, C. and Pomorski, L. (2012), Decoding Inside Information. The Journal of Finance (67): 1009-1043. https://doi.org/10.1111/j.1540-6261.2012.01740.x
- Jagolinzer, Alan D. (2009), SEC Rule 10b5-1 and Insiders' Strategic Trade. Management Science 55(2):224-239. https://doi.org/10.1287/mnsc.1080.0928
- Balogh, Attila, 2023, "Layline insider trading dataset", https://doi.org/10.7910/DVN/VH6GVH, Harvard Dataverse, V418





Topic Description

- Transparency is an important aspect of financial markets. For example, pre-trade transparency allows market participants to see the limit orders waiting in the order book. However, this transparency naturally reveals trading intentions, which may have adverse effects. The optimal degree of transparency is hence a debated topic.
- Iceberg orders display only a portion of the total order size at once (the "tip of the iceberg"). They are most commonly used by institutional traders and large market participants. These traders typically need to execute large orders without revealing the full size to the market, which could otherwise move prices unfavorably. Using iceberg orders, they can minimize market impact and achieve better pricing over time.
- This thesis investigates the impact of introducing iceberg orders on market quality, liquidity, and trading activity. To this end, trade and quote data on several trading pairs at a large cryptocurrency exchange will be provided. The unique setting of the cryptocurrency exchange, where assets trade against both fiat currencies and stablecoins, with iceberg orders introduced exclusively for the crypto-fiat pair, provides a clean control group.

Requirements

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





- Frey, S., & Sandås, P. (2017). The impact of iceberg orders in limit order books. Quarterly Journal of Finance, 7(03), 1750007.
- Zotikov, D., & Antonov, A. (2021). CME iceberg order detection and prediction. Quantitative Finance, 21(11), 1977-1992.
- Esser, A., & Mönch, B. (2007). The navigation of an iceberg: The optimal use of hidden orders. Finance Research Letters, 4(2), 68-81.
- Lajbcygier, P., & Vu, V. H. (forthcoming). Who can see the iceberg's peak? How icebergs are used by information and liquidity traders. Journal of Financial Research.
- Eom, K. S., Ok, J., & Park, J. H. (2007). Pre-trade transparency and market quality. Journal of Financial Markets, 10(4), 319-341.
- Boehmer, E., Saar, G., & Yu, L. (2005). Lifting the veil: An analysis of pre-trade transparency at the NYSE. The Journal of Finance, 60(2), 783-815.
- Kovaleva, P., & Iori, G. (2015). The impact of reduced pre-trade transparency regimes on market quality. Journal of Economic Dynamics and Control, 57, 145-162.
- Gozluklu, A. E. (2016). Pre-trade transparency and informed trading: Experimental evidence on undisclosed orders. Journal of Financial Markets, 28, 91-115.
- Degryse, H., Karagiannis, N., Tombeur, G., & Wuyts, G. (2021). Two shades of opacity: Hidden orders and dark trading. Journal of Financial Intermediation, 47, 100919.
- Hendershott, T., Wee, M., & Wen, Y. (2022). Transparency in fragmented markets: Experimental evidence. Journal of Financial Markets, 59, 100732.



T7. Earnings News and Over-the-Counter Markets Justus Veehof



Topic Description

- Many empirical studies find that, due to heighted information asymmetry, a stock's liquidity decreases prior to earnings announcements. Huber et al. (2024) is the first study to investigate whether the same holds true for corporate bonds, which primarily trade in over-the-counter markets where investors willing to trade search the dealer network and negotiate a price. Interestingly, the researchers document an increase in corporate bond liquidity on days with earnings news. The suggested mechanism is that the heightened trading interest increases the number of potential counterparties, thereby enhancing investors' bargaining power when negotiating with dealers.
- The objective of this thesis is threefold. The student should (1) review the literature on earnings announcements and corporate bonds (2) replicate the empirical analyses of Huber et al. (2024) (3) extend the analyses of Huber et al. (2024).

Requirements

The empirical work requires the use of large databases (i.e. TRACE, Refinitiv Eikon, IBES). 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) and econometric methods.



T7. Earnings News and Over-the-Counter Markets Justus Veehof



- Huber, Stefan J.; Chongho, Kim; Watts, Edward M. (2024): Earnings News and Over-the-Counter Markets. Journal of Accounting Research 62 (2) pp. 701-735.
- Wei, Jason; Zhou, Xing (2016): Informed Trading in Corporate Bonds Prior to Earnings Announcements. Financial Management 45 (3), pp. 641-674.
- Bessembinder, Hendrik; Spatt, Chester; Venkataraman, Kumar (2020): A Survey of the Microstructure of Fixed-Income Markets. Journal of Financial and Quantitative Analysis 55 (1), pp. 1-45.



T8. Financial Analysts, Market Efficiency, and Long-Run Stock Performance Daniel Weiß

UNIVERSITY OF MANNHEIM Business School

Topic Description

- Financial analysts who publish reports, forecasts, and opinions on companies and stocks play a vital role in capital markets by facilitating the flow of information to different market participants (Kothari et al., 2016). One type of analyst opinion comes in the form of stock recommendations for individual stocks. These recommendations are regularly updated and typically range from "Strong Sell" to "Strong Buy".
- A large body of literature has analyzed the role of financial analysts as information providers and the corresponding asset pricing implications including Post-Revision-Drift (PRD): The empirical observation that future stock returns tend to drift in the same direction as an analyst's recommendation change.
- Altınkılıç et al. (2016) re-examine PRD and find that the effect virtually vanishes post-2003. They argue that the introduction of supercomputers and high-frequency trading produces this observation due to a reduction in trading costs speaking in favor of higher market efficiency and limiting the importance of analysts as information providers in the digital age. However, their sample period ends in 2010 and current research on PRD is rather scarce. If their transaction cost-argument holds, one should not expect a significant PRD in recent years.
- The goal of this master thesis is threefold: First, the student should review the literature on the role of financial analysts as information intermediaries in the face of market efficiency. Second, the student should replicate the main analysis by Altınkılıç et al. (2016) using analyst stock recommendations from I/B/E/S. Third, the student should extend the analysis using a more recent sample period to examine whether their transaction cost-argument still holds.

Requirements

The empirical work requires the use of large databases (i.e., I/B/E/S, 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 (i.e., STATA, R) and econometric methods.



T8. Financial Analysts, Market Efficiency, and Long-Run Stock Performance



Daniel Weiß

- Altınkılıç, O., Hansen, R. S., & Ye, L. (2016). Can analysts pick stocks for the long-run?. *Journal of Financial Economics*, *119*(2), 371-398.
- Barber, B., Lehavy, R., McNichols, M., & Trueman, B. (2001). Can investors profit from the prophets? Security analyst recommendations and stock returns. *The Journal of Finance*, *56*(2), 531-563.
- Bradley, D., Clarke, J., Lee, S., & Ornthanalai, C. (2014). Are analysts' recommendations informative? Intraday evidence on the impact of time stamp delays. *The Journal of Finance*, *69*(2), 645-673.
- Cao, S., Jiang, W., Wang, J., & Yang, B. (2024). From man vs. machine to man+ machine: The art and AI of stock analyses. *Journal of Financial Economics*, *160*, 103910.
- Daniel, K., Grinblatt, M., Titman, S., & Wermers, R. (1997). Measuring mutual fund performance with characteristic-based benchmarks. *The Journal of Finance*, *52*(3), 1035-1058.
- Fama, E. F. (1970). Efficient capital markets. The *Journal of Finance*, *25*(2), 383-417.
- Grossman, S. J., & Stiglitz, J. E. (1980). On the impossibility of informationally efficient markets. *American Economic Review*, 70(3), 393-408.
- Kothari, S. P., So, E., & Verdi, R. (2016). Analysts' forecasts and asset pricing: A survey. *Annual Review of Financial Economics*, 8(1), 197-219.
- Loh, R. K., & Stulz, R. M. (2011). When are analyst recommendation changes influential? *The Review of Financial Studies*, 24(2), 593-627.
- Stickel, S. E. (1992). Reputation and performance among security analysts. *The Journal of Finance*, 47(5), 1811-1836.



T9. Dissecting the Long-term Performance Mengnan Wu



Topic Description

- Stringent listing requirements in the domestic market, among other factors, have led to a substantial number of Chinese firms opting for external listings. Domestically listed firms in the A-share market have shown worse performance. The problematic listing processes lead to adverse selection of firms in the A-share market.
- Allen et al. (2024) propose a model where institutional and corporate governance reforms in the A-share market lead to permanently higher cash flow growth for the representative firm. When these reforms take effect, stock prices rise and returns align with the market's opportunity cost of capital. However, if fully rational investors fail to recognize the reforms' announcement and implementation, the model predicts that current-period stock returns will fall below the opportunity cost of capital.
- Following Allen et al. 2024, the student should 1) document and compare the underperformance of A-share firms, measured through stock returns, relative to firms in other markets or to Chinese companies that have pursued external listings, and 2) empirically examine the factors contributing to the gaps in stock returns and accounting performance.

Requirements

The empirical work requires the use of large databases (i.e. Eikon, Compustat, CRSP and CSMAR). Some of the required databases are readily accessible for affiliates of the University of Mannheim, and some will be provided by the thesis supervisor. The candidate should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.



T9. Dissecting the Long-term Performance Mengnan Wu



- Allen, F., Qian, J., Shan, C., & Zhu, J. L. (2024). Dissecting the long-term performance of the Chinese stock market. *The Journal of Finance*, 79(2), 993-1054.
- Bessembinder, H., Cooper, M. J., & Zhang, F. (2019). Characteristic-based benchmark returns and corporate events. *The Review of Financial Studies*, 32(1), 75-125.
- Jia, C., Wang, Y., & Xiong, W. (2017). Market segmentation and differential reactions of local and foreign investors to analyst recommendations. *The Review of Financial Studies*, 30(9), 2972-3008.
- Lee, C. M., Qu, Y., & Shen, T. (2023). Gate fees: The pervasive effect of IPO restrictions on Chinese equity markets. *Review of Finance*, 27(3), 809-849.

