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Seminar "Frontier Topics in Finance", FSS 2026

Topic R1: Lottery Preferences and Asset Pricing Anomalies
Advisor: Alexandros Pierides

Topic R2: Persistence or Reversal? Trading Volume and Stock Return Dynamics
Advisor: Alexandros Pierides

Topic R3: Systematic Mispricing and the Risk-Return Trade-off
Advisor: Qi Zhang

Topic R4: Passive Investment in Mutual Fund Families
Advisor: Qi Zhang

Topic R5: Time to shine
Advisor: Paul Seidel

A general remark:

All topics focus on empirical analyses (as most seminar topics or master's thesis offered in the finance area). The empirical work requires obtaining data and the use of a statistical software program (such as STATA) to process and analyze the data. Data can be retrieved from databases that are readily accessible for affiliates of the University of Mannheim or is provided by the advisors. You should be motivated to acquire necessary skills for databases, software and econometric methods during the writing phase.

Topic R1: Lottery Preferences and Asset Pricing Anomalies

Classification: Empirical topic

Advisor: Alexandros Pierides

In recent years, behavioral finance has increasingly emphasized the role of investor preferences in explaining asset pricing patterns that traditional risk-based models struggle to reconcile. A prominent example is the class of "lottery-like" stocks — securities with positively skewed return distributions that resemble lottery tickets. Such stocks tend to attract retail investors seeking large potential payoffs despite low expected returns. This form of investor demand distortion has been used to explain a wide range of return anomalies, including the idiosyncratic volatility (IVOL) puzzle, the maximum daily return (MAX) effect, and the skewness premium. As markets evolve and investor composition changes, understanding how reference-dependent and asymmetric preferences shape asset prices remains a central question in modern empirical asset pricing.

A recent study by An et al. (2020) provides a rigorous behavioral foundation for these patterns. Building on prospect theory and reference-dependent preferences, the authors show that investors overweight lottery-like payoffs and underweight the probability of losses, generating systematic mispricing in the cross section of stock returns. They demonstrate that this behavioral mechanism can jointly explain several well-known anomalies, including the MAX effect, skewness-related premiums, and the underperformance of lottery-type stocks. Using U.S. stock market data, the authors construct empirical proxies for reference-dependent preferences and show that these proxies strongly predict the returns of portfolios sorted on lottery characteristics.

The aim of this thesis is as follows: first, the student is expected to broadly replicate the basic findings of An et al. (2020). This includes constructing measures of lottery-like payoffs, testing their relation to future returns, and evaluating whether reference-dependent preference proxies explain cross-sectional variations in these anomalies. Second, the student may extend the analysis by examining whether the strength of lottery-related mispricing varies across market regimes (e.g., high vs. low volatility periods) or extend the analysis into more recent years.

Requirements: The empirical work requires the use of large databases, e.g., CRSP/Compustat. The databases are readily accessible to affiliates of the University of Mannheim. The candidate should feel comfortable with the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

- An, L., Wang, H., Wang, J., and Yu, J. (2020). Lottery-related anomalies: the role of reference-dependent preferences. Management Science, 66(1):473–501.
- Bali, T. G., Cakici, N., and Whitelaw, R. F. (2011). Maxing out: Stocks as lotteries and the cross-section of expected returns. Journal of financial economics, 99(2):427–446.
- Barberis, N. and Huang, M. (2008). Stocks as lotteries: The implications of probability weighting for security prices. American Economic Review, 98(5):2066–2100.
- Boyer, B., Mitton, T., and Vorkink, K. (2010). Expected idiosyncratic skewness. The Review of Financial Studies, 23(1):169–202.

Topic R2: Persistence or Reversal? Trading Volume and Stock Return Dynamics

Classification: Empirical topic

Advisor: Alexandros Pierides

Understanding whether return predictability reflects persistent mispricing or short-term correction remains a central question in empirical asset pricing. A large literature documents that stock returns covary with past trading activity: high trading volume is often associated with stronger investor disagreement, shifts in attention, or speculative trading pressure. Yet the implications of abnormal trading volume for future return dynamics remain ambiguous. Some theories predict that elevated trading volume signals informed trading and therefore leads to return continuation, while behavioral models argue that high volume may signal temporary overreaction and subsequent reversals.

A recent paper by Li et al. (2024) provides new evidence on this debate by examining whether abnormal trading volume (ATV) leads to return persistence or reversal. They show that the relationship between ATV and future returns is not constant but depends on both the estimation window for ATV and the prediction horizon for returns. Motivated by behavioral theories in which ATV serves as a proxy for investor sentiment and temporary mispricing, the authors propose a new measure that captures the persistence of sentiment embedded in trading activity. Consistent with these ideas, they find that abnormal trading volume predicts significant return reversals, reflecting the correction of sentiment-driven price pressure. Moreover, the magnitude and direction of predictability vary systematically with the persistence of investor sentiment.

The aim of this thesis is as follows: first, the student is expected to broadly replicate the basic findings of Li et al. (2024). This includes constructing measures of lottery-like payoffs, testing their relation to future returns, and evaluating whether reference-dependent preference proxies explain cross-sectional variations in these anomalies. Second, the student may extend the analysis by exploring whether the persistence-or-reversal pattern depends on additional conditioning variables such as volatility regimes, retail trading intensity, institutional ownership, or market-wide sentiment indicators.

Requirements: The empirical work requires the use of large databases, e.g., CRSP/Compustat. The databases are readily accessible to affiliates of the University of Mannheim. The candidate should feel comfortable with the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

- Baker, M. and Stein, J. C. (2004). Market liquidity as a sentiment indicator. Journal of financial Markets, 7(3):271–299.
- Barberis, N., Greenwood, R., Jin, L., and Shleifer, A. (2018). Extrapolation and bubbles. Journal of Financial Economics, 129(2):203–227.
- Gervais, S., Kaniel, R., and Mingelgrin, D. H. (2001). The high-volume return premium. The journal of finance, 56(3):877–919.
- Li, M., Yin, X., and Zhao, J. (2024). Persistence or reversal? The effects of abnormal trading volume on stock returns. The European Journal of Finance, pages 1–24.

Topic R3: Systematic Mispricing and the Risk-Return Trade-off

Classification: Empirical topic

Advisor: Qi Zhang

In traditional asset pricing factor models, various kinds of risk factors have been used to explain the returns, and the unexplained component is attributed to mispricing. However, it failed to explain return premium via this approach for distressed stocks (stocks of companies that face financial trouble). This runs counter to financial intuition, as high returns are often accompanied by high risk.

In a recent study, Birru et al. (2025) adopt a different perspective that starts from a benchmark model with only systematic mispricing factors and then attributes the unexplained component of returns to risk. They show that high beta, distressed, and illiquid stocks do receive relatively a large compensation for risk, which is only evident after controlling for systematic mispricing. They also find that systematic mispricing mainly affects speculative stocks, which are overpriced and eventually have lower predicted returns.

The aim of this thesis is as follows: first, the student should broadly replicate the basic findings of Birru et al. (2025). Are there positive risk-return relations for distressed and high beta stocks if systematic mispricing is controlled? Second, the student is expected to extend the analysis to cover the most recent years.

Requirements: The empirical work requires the use of large databases, e.g., CRSP/Compustat. The databases are readily accessible to affiliates of the University of Mannheim. The candidate should feel comfortable with the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

- Birru, J., Mohrschladt, H., & Young, T. (2025). Systematic Mispricing of Speculative Stocks and the Cross-Sectional Risk-Return Trade-off. *Management Science*.

Topic R4: Passive Investment in Mutual Fund Families

Classification: Empirical topic

Advisor: Qi Zhang

More active equity funds now operate in families that offer passive funds. Dannhauser et al. (2023) shows that the percentage of funds managed in active-only families has fallen from 80% to 42%. This trend can attract assets but will also revoke the active fund managers' rights.

Dannhauser et al. (2023) examines the impact of passive investment on active funds within their own family. They find that active mutual funds in families with greater representation in index mutual funds have higher gross performance. They also show that greater index mutual fund family representation will lead to lower management and operating expenses.

The aim of this thesis is as follows: first, the student should broadly replicate the basic findings of Dannhauser et al. (2023). Is gross performance positively related to the level of passive investment? Do index mutual funds increase the expense pressure? Second, the student should explore the impact of passive investment on fund flows. Third, the student should extend the analysis to cover the most recent years.

Requirements: The empirical work requires the use of large databases, e.g., Morningstar, CRSP/Compustat. The databases are readily accessible to affiliates of the University of Mannheim. The candidate should feel comfortable with the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

- Cremers, M., Ferreira, M. A., Matos, P., & Starks, L. (2016). Indexing and active fund management: International evidence. *Journal of Financial Economics*, *120*(3), 539-560.
- Dannhauser, C. D., & Spilker III, H. D. (2023). The modern mutual fund family. *Journal of Financial Economics*, *148*(1), 1-20.

Topic R5: Time to shine

Classification: Empirical topic

Advisor: Paul Seidel

There is an ongoing debate on the persistence of market anomalies, their economic significance after publication and consequently informational efficient markets. Bowles et al. (2024) show that many "classic" anomalies only deliver abnormal returns in the very first weeks after the underlying fundamentals are released; using stale data (for example, the traditional June formation date) makes several signals look insignificant. This project will let students quantify the information content of point-in-time (PIT) fundamentals and evaluate its impact on a set of well-known market anomalies.

Main tasks:

- Replicate the main findings of Bowles et al. 2024 including the quantification of the effect of PIT data / having the latest information. Moreover, the student should select accounting-based anomalies. form long–short portfolios (i) at the traditional June date and (ii) immediately after each firm's first information release, estimate risk-adjusted returns with the FF5+momentum model and evaluate whether abnormal returns concentrate in the first post-release month, mirroring Bowles et al.'s findings.

- Extend the study with some self-selected ideas or some extensions, which will be developed together with the supervisor.

Data:

CRSP and Compustat data is available via WRDS. Additional data will be provided by the supervisor. The student should feel comfortable with or should be willing to start working with large datasets and statistical tools such as Python.

Introductory Literature:

- Bowles, B., Reed, A.V., Ringgenberg, M., & Thornock, J. (2024). Anomaly Time. Journal of Finance, 79(5), 3543–3579.
- Fama, E.F., & French, K.R. (2015). A Five-Factor Asset-Pricing Model. Journal of Financial Economics, 116(1), 1-22.