Asset Pricing & Asset Management

Master Seminar (374001)

Institute of Finance and Commodity Markets

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Schedule

- Submission of list of topic preferences until:

  Monday, 31st January 2022, 11:59 p.m. via email
- Topic assignment:

  Wednesday, 2nd February 2022
- Binding registration until:

  Friday, 4th February 2022, 11:59 p.m. via email
- Submission of seminar paper until:

  Friday, 20th May 2022, 11:59 p.m. via email
- Presentations:

  End of May / beginning of June

Requirements

- Preparation of a seminar paper in groups of 2 or 3
- Scope: 20 pages (groups of 2), 25 pages (groups of 3)
- Independently performed empirical application or quantitative analysis is the core of the seminar paper
- Use of appropriate statistics software such as R, STATA, or Matlab is highly recommended
- Pure literature research is not sufficient
- Presentations of the seminar papers will be held in a blocked seminar in May or June
- Assessment: 60% written work, 40% presentation

Topic 1: The Conditional CAPM

Description & Task:

- The static version of the Capital Asset Pricing Model (CAPM) fails in explaining cross-sectional differences between stock returns. However, one possible reason for this could be time-variation in beta.
- Theoretical description of different versions of the conditional CAPM.
- Empirical evaluation of the conditional CAPM with a European dataset.

Basic Literature:

- Jagannathan, R., & Wang, Z. (1996). The conditional CAPM and the cross-section of expected returns. *Journal of Finance*, *51*(1), 3-53.
- Lewellen, J., & Nagel, S. (2006). The conditional CAPM does not explain asset-pricing anomalies. *Journal of Financial Economics*, *82*(2), 289-314.

Topic 2: Betting Against Beta

Description & Task:

- One popular explanation for empirical shortcomings of the CAPM are leverage-constraints. Because leverage is limited, investors have to buy high-beta stocks to increase the risk of their portfolio. High demand for these stocks causes them to have negative alphas and the empirical security market line to be too flat relative to the predictions by the CAPM.
- Theoretical examination of leverage-constraints.
- Empirical investigation of the performance of a betting-against-beta strategy.

Basic Literature:

- Black, F. (1972). Capital market equilibrium with restricted borrowing. *Journal of Business*, *45*(3), 444-455.
- Frazzini, A., & Pedersen, L. H. (2014). Betting against beta. *Journal of Financial Economics*, 111(1), 1-25.

Topic 3: Multi-Factor Models

Description & Task:

- Based on the failure of CAPM-tests, researchers identified several empirical factors that presumably drive asset returns.
- Empirical examination of the German stock market on the basis of the Fama-French 3-Factor Model and Carhart 4-Factor Model.
- Compute the factors yourself and test whether the models can price assets via a GRS test.

Basic Literature:

- Carhart, M. M. (1997). On persistence in mutual fund performance. *Journal of Finance*, 52(1), 57-82.
- Fama, E. F., & French, K. R. (1993). Common Risk Factors in the Returns on Stocks and Bonds. *Journal of Financial Economics*, 33(1), 3–56.
- Gibbons, M. R., Ross, S. A., & Shanken, J. (1989). A test of the efficiency of a given portfolio. *Econometrica: Journal of the Econometric Society*, 1121-1152.

Topic 4: Profitability and Asset Prices

Description & Task:

- A new stylized empirical fact in financial markets is that more profitable firms earn higher risk-adjusted returns on average.
- Review the literature on the profitability anomaly with different definitions and test whether it is present in a European stock market.

Basic Literature:

- Fama, E. F., & French, K. R. (2017). International tests of a five-factor asset pricing model. Journal of Financial Economics, 123(3), 441-463.
- Hou, K., Xue, C., & Zhang, L. (2015). Digesting anomalies: An investment approach. Review of Financial Studies, 28(3), 650-705.
- Novy-Marx, R. (2013). The other side of value: The gross profitability premium. Journal of Financial Economics, 108(1), 1-28.

Topic 5: Investment and Asset Prices

Description & Task:

- A new stylized empirical fact in financial markets is that firms that invest less earn higher risk-adjusted returns on average.
- Review the literature on the investment anomaly with different definitions and test whether it is present in a European stock market.

Basic Literature:

- •Fama, E. F., & French, K. R. (2017). International tests of a five-factor asset pricing model. Journal of Financial Economics, 123(3), 441-463.
- Hou, K., Xue, C., & Zhang, L. (2015). Digesting anomalies: An investment approach. Review of Financial Studies, 28(3), 650-705.

Topic 6: Momentum and Asset Prices

Description & Task:

- The momentum anomaly describes a pattern that in the medium term, “losers” on average continue to be “losers” and winners tend to further appreciate in their prices.
- First review the empirical and theoretical literature on the momentum anomaly.
- Empirically investigate momentum using portfolio sorts or regression tests.

Basic Literature:

- Goyal, A., & Jegadeesh, N. (2017). Cross-Sectional and Time-Series Tests of Return Predictability: What Is the Difference? *Review of Financial Studies*, *31*(5), 1784-1824.
- Jegadeesh, N., & Titman, S. (1993). Returns to buying winners and selling losers: Implications for stock market efficiency. *Journal of Finance*, *48*(1), 65-91.

Topic 7: International Asset Pricing

Description & Task:

- One makes systematic mistakes when using a local asset pricing model even though assets are priced globally.
- Review the literature on global vs. local asset pricing and test both local and global asset pricing models.

Basic Literature:

- Karolyi, G. A., & Stulz, R. M. (2003). Are financial assets priced locally or globally? Handbook of the Economics of Finance, 1, 975-1020.
- Fama, E. F., & French, K. R. (2012). Size, value, and momentum in international stock returns. Journal of Financial Economics, 105(3), 457-472.

Topic 8: Idiosyncratic Volatility

Description & Task:

- According to classical theory, idiosyncratic volatility can be fully diversified and, thus, should not be priced in the market. However, Ang et al. (2006) show that idiosyncratic volatility is priced, a finding which is often referred to as the "idiosyncratic volatility puzzle".
- Review of the literature on idiosyncratic volatility.
- Empirical evaluation of the idiosyncratic volatility puzzle for a European dataset.

Basic Literature:

- Ang, A., Hodrick, R. J., Xing, Y., & Zhang, X. (2006). The cross-section of volatility and expected returns. *Journal of Finance*, *61*(1), 259-299.
- Ang, A., Hodrick, R. J., Xing, Y., & Zhang, X. (2009). High idiosyncratic volatility and low returns: International and further US evidence. *Journal of Financial Economics*, *91*(1), 1-23.
- Bali, T. G., & Cakici, N. (2008). Idiosyncratic volatility and the cross section of expected returns. *Journal of Financial and Quantitative Analysis*, *43*(01), 29-58.

Topic 9: Horizon Pricing

Description & Task:

- The performance of pricing models may be horizon dependent due to different planning periods of investors.
- Estimate horizon-dependent factor risk premia of major asset pricing factors for the European stock market.

Basic Literature:

- Kamara, A., Korajczyk, R. A., Lou, X., & Sadka, R. (2016). Horizon pricing. Journal of Financial and Quantitative Analysis, 51(6), 1769-1793.