

This course is an introduction to the empirical literature on asset pricing and investments. The primary focus will be on methodological issues and about the interpretation of econometric analysis as applied to financial hypotheses. It is assumed that students have had previous exposure to asset pricing theory and probability and statistics/econometrics.

Please focus on the readings that are in **bold**. We will only cover material that has not already been covered in Part I of this course.

Class 1: CAPM and anomalies

- **Fama: Foundations of Finance Chapters 0-5 and 7-9. (Skip pages 305-319)**
- Black, Jensen and Scholes, 1972, The Capital Asset Pricing Model: Some Empirical Tests, in M. Jensen ed., *Studies in the Theory of Capital Markets*, New York: Praeger.
- Fama and MacBeth, 1973, Risk, Return, and Equilibrium: Empirical Tests, *Journal of Political Economy* 91, 607-636.
- Roll, R., 1977, A critique of asset pricing theory's tests part I: On past and potential testability of the theory, *Journal of Financial Economics* 4, 129-176.
- Gibbons, M., 1982, Multivariate Tests of Financial Models: A New Approach, *Journal of Financial Economics* 10, 3-27.
- Shanken, J., 1987, Multivariate Proxies and Asset Pricing Relations: Living with the Roll Critique, *Journal of Financial Economics* 18, 91-110.
- Gibbons and Ferson, 1985, Testing Asset Pricing Models with Time-Varying Expectations and an Unobservable Market Portfolio, *Journal of Financial Economics* 14, 217-236.
- Chen, Roll, and Ross, 1986, Economic Forces and the Stock Market, *Journal of Business* 56, 383- 403.
- Litzenberger, R., and K. Ramaswamy, 1979, The Effect of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence, *Journal of Financial Economics* 7, 163-195. (Skip pages 167-172)
- Shanken, J., 1992, On the Estimation of Beta-Pricing Models, *Review of Financial Studies* 5, 1-33.
- Fama, E. and French, K., 1992, The Cross-Section of Expected Stock Returns, *Journal of Finance* 47, pp. 427-465.
- Fama, Eugene F. and Kenneth R. French, 1993, Common risk factors in the returns on bonds and stocks, *Journal of Financial Economics* 33, 3-56.
- **Jegadeesh, N., 1990, Evidence of Predictable Behavior of Security Returns, *Journal of Finance* 45, 881-898.**
- Jegadeesh, Narasimhan and Sheridan Titman, 1993, Returns to buying winners and selling losers: Implications for stock market efficiency, *Journal of Finance* 48, 65-91.
- Lehmann, Bruce, 1990, Fads, Martingales, and Market Efficiency, *Quarterly Journal of Economics* 105, 1-28.

- [Avramov, A., T. Chordia, A. Goyal](#), 2006, Liquidity and Autocorrelations in Individual Stock Returns, *Journal of Finance* 61, 2365-2394.
- [Bernard, V., and J. Thomas](#), 1989, Post-Earnings Announcement Drift: Delayed Price Reaction or Risk Premium?, *Journal of Accounting Research* 27 , 1-36.
- [Diether, K., C. T. Malloy and A. Scherbina](#), 2002, Differences of Opinion and the Cross Section of Stock Returns, *Journal of Finance* 57, 2113-2141.
- Cooper, M., G. Huseyin and M. J. Schill, 2008, Asset Growth and the Cross-Section of Stock Returns, *Journal of Finance* 63, 1609-1651.
- [Sloan, R.](#), 1996, Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings? *Accounting Review* 71, 289-315.
- Novy-Marx, Robert, 2013, The other side of value: The gross profitability premium, *Journal of Financial Economics* 108, 1-28.
- [Ang, A., R. Hodrick, Y. Xing and X. Zhang](#), 2006, The Cross-Section of Volatility and Expected Returns, *Journal of Finance* 61, 259-299.
- [Loughran, Tim and Jay Ritter](#), 1995, The new-issues puzzle, *Journal of Finance* 50, 23-52.
- Lyon, John D., Brad M. Barber, and Chih-Ling Tsai, 1999, Improved methods for tests of long-run abnormal stock returns, *Journal of Finance* 54, 165-201. (Skip, if lack of time)
- [Jegadeesh, Narasimhan and Jason Karceski](#), 2009, Long-Run Performance Evaluation: Correlation and Heteroskedasticity-Consistent Tests, *Journal of Empirical Finance*, 101-111.

Class 2: Multifactor Benchmarks

- Fama, E. and French, K., 1996, Multifactor Explanations of Asset Pricing Anomalies, *Journal of Finance* 47, pp. 427-465.
- Daniel, K. and S. Titman, 1997, Evidence on the characteristics of cross-sectional variation in stock returns, *Journal of Finance* 52, 1-33.
- Daniel, K., M. Grinblatt, S. Titman and R. Wermers, 1997, Measuring Mutual Fund Performance with Characteristic-Based Benchmarks, *Journal of Finance* 52, 1035-1058.
- Davis, Fama, and French, “Characteristics, Covariances, and Average Returns: 1929 to 1997,” *Journal of Finance*, 55, 389-406. (Skip, if lack of time)
- Lewellen, J., S. Nagel and Shanken, J., 2010, A Skeptical Appraisal of Asset Pricing Tests, *Journal of Financial Economics* 96, 175-194.
- Jagannathan, R., and Z. Wang, 1996, The Conditional CAPM and the Cross-Section of Expected Returns, *Journal of Finance* 51, 3-53.
- [Fama, Eugene F. and Kenneth R. French](#), 2015, A five-factor asset pricing model, *Journal of Financial Economics* 116, 1-22.
- [Hou, Kewei, Chen Xue and Lu Zhang](#), 2015, Digesting anomalies: An investment approach, *Review of Financial Studies* 28, 650-705.
- Barillas, Francisco and Jay Shanken, 2016, Which Alpha, Available at SSRN: <https://ssrn.com/abstract=2610864>.
- Stambaugh, Rob and Yu Yuan, 2016, Mispricing Factors, Available at SSRN: <https://ssrn.com/abstract=2626701>
- Barillas, Francisco and Jay Shanken, 2017, Comparing Asset Pricing Models, Available at SSRN: <https://ssrn.com/abstract=2676709>

- Fama, Eugene F. and Kenneth R. French, 2017, Choosing Factors, Available at SSRN: <https://ssrn.com/abstract=2668236>
- Pukthuanthong, Kuntara, Richard Roll, and Avanidhar Subrahmanyam, 2017, A Protocol for Factor Identification, Available at <https://ssrn.com/abstract=3005477>

Class 3: Anomalies

- Lo, Andrew and Craig MacKinlay, 1990, Data-Snooping Biases in Tests of Financial Asset Pricing Models, *Review of Financial Studies* 3, 431-467.
- [Brennan, M., T. Chordia, and A. Subrahmanyam](#), 1998, Alternative factor specifications, security characteristics, and the cross-section of expected stock returns, *Journal of Financial Economics* 49, 345- 373.
- [Avramov, Doron and Tarun Chordia](#), 2006, Asset Pricing Models and Financial Market Anomalies, *Review of Financial Studies* 19, 1001-1040.
- Fama Eugene F. and Kenneth R. French, 2008, Dissecting Anomalies, *Journal of Finance* 63, 1653-1678.
- [Avramov, Doron, Tarun Chordia, Gergana Jostova and Alexander Philipov](#), 2013, Anomalies and Financial Distress, *Journal of Financial Economics* 108, 139-159.
- [Chordia, Tarun, Avanidhar Subrahmanyam and Qing Tong](#), 2014, Have Capital Market Anomalies Attenuated in the Recent Era of High Liquidity and Trading Activity?, *Journal of Accounting and Economics* 58, 41-58.
- [Chordia, T., A. Goyal and J. Shanken](#), 2013, Cross-Sectional Asset Pricing with Individual Stocks: Betas versus Characteristics, Working paper.
- Jegadeesh Narasimhan, Joonki Noh, Kuntara Pukthuanthong, Richard Roll, and Junbo Wang, 2017, Empirical tests of asset pricing models with individual assets: Resolving the Errors-in-Variables bias in risk premium estimates, Available at SSRN: <https://ssrn.com/abstract=2897821>
- [Fama Eugene F. and Kenneth R. French](#), 2015, Dissecting anomalies in a five-factor model, *Review of Financial Studies* 29, 69-103.

Class 4: p-hacking and Market Efficiency

- [Fama Eugene F.](#), 1998, Market efficiency, long-term returns, and behavioral finance, *Journal of Financial Economics* 49, 283-306.
- [Harvey, Campbell, Yan Liu and Heqing Zhu](#), 2016, ... and the cross-section of stock returns, *Review of Financial Studies* 29, 5-68.
- [Harvey, Campbell](#), 2017, Presidential address: The scientific outlook in financial economics, *Journal of Finance* forthcoming.
- McLean, David and Jeffrey Pontiff, 2016, Does academic research destroy stock return predictability?, *Journal of Finance* 71, 5-32.
- Linnainmaa, Juhani and Michael Roberts, 2017, The history of the cross section of stock returns, Available at SSRN: <https://ssrn.com/abstract=2897719>
- Hou, Kewei and Xue, Chen and Zhang, Lu, 2017, Replicating Anomalies, Available at SSRN: <https://ssrn.com/abstract=2961979>
- Chordia, Tarun, Amit Goyal and Alessio Saretto, 2017, p-hacking: Evidence from two million strategies, Available at SSRN: <https://ssrn.com/abstract=3017677>