

FINA 6252 Empirical Asset Pricing, Part II

1. Basic information

- Course Instructor: Prof. Chanik Jo (chanikjo@cuhk.edu.hk), Office: CYT 1252
- Teaching Assistant: Siyuan Wu (siyuanwu@link.cuhk.edu.hk), Office: CYT 1155
- Instructor office hours: By email
- Class schedule: March 26, April 2, 9, 16, 23 (1:30 pm – 4:30 pm), **May 8** (1:30 pm – 6:00 pm)
- Course Web: Dropbox
- Teaching Venue: Room 1228A, 12/F, Cheng Yu Tung Building, CUHK

2. Course Description

This Ph.D.-level course introduces students to the empirical asset pricing side of financial economics. By the end of the course, students are expected to:

1. have a comprehensive understanding of relevant economic questions in asset pricing
2. be familiar with the classic papers as well as recent contributions to frontier topics
3. be able to analyze and evaluate new research efficiently
4. have acquired the skills to conduct and communicate original asset pricing research

The focus will be on learning how to implement recent advances in the area, and to help develop ideas for new high-quality research. To achieve this, the course will involve a combination of readings, discussions, and implementation.

3. Evaluations

The grade will be based on two assignments (10%), two presentations (30%), a research project (50%), and class participation (10%).

3.1 Two assignments

Please see [Section 6](#) below for details.

- Assignment 1: Replication exercise (Due: Apr. 16)
- Assignment 2: Referee report (Due: **May. 22**)

3.2 Two presentations

There will be two presentations for 30 min. each. The evaluation is based on (1) your presentation skills, (2) time management, (3) how well you organize your slides, and (4) how clearly you answer questions.

- Presentation 1: read one of the papers on the list in Section 5 in each session and present (1) the motivation of the paper, (2) the main findings, (3) criticize the paper or potential extension of the paper (4) follow-up paper(s) that address limitations of the paper you discuss if any, (5) answer questions.
- Presentation 2: present your research project. Details are in Section 3.3

3.3 Research project

The final research project consists of a research proposal where students propose a research question and empirical methods. This part is designed to help students to try to come up with a research idea that can be potentially developed into a second-year paper. The topic can be anything in asset pricing. I strongly encourage students, if possible, to present preliminary analysis results (e.g., simple summary statistics and regression results). Students will be required to present their research proposal for the last class in Session 6. You can communicate with me or TA to choose the topic and make progress. It is *optional* to write a manuscript to describe and discuss your work.

4. Topics

Session 1. Introduction & Textual Data in asset pricing (March 26)

+ Introduction of the instructor and students

Session 2. ESG in asset pricing (April 2)

+ How to write a referee report

Session 3. Macro-finance in asset pricing (April 9)

+ Asset pricing theories recap: CCAPM, CAPM, ICAPM, Habit, long-run, and disaster-risk

Session 4. Low-Risk Anomalies, Institutional Investors (Part 1) (April 16)

Session 5. Institutional investors (Part 2), Political finance in asset pricing (April 23)

Session 6. Research paper presentation (April 30)

Please see Section 3.3 above.

5. List of readings

Session 1. Introduction & Textual Data in asset pricing

Tetlock, P. C. (2007). Giving content to investor sentiment: The role of media in the stock market. *Journal of Finance*, 62(3), 1139-1168.

Tetlock, P. C., Saar-Tsechansky, M., & Macskassy, S. (2008). More than words: Quantifying language to measure firms' fundamentals. *Journal of Finance*, 63(3), 1437-1467.

Da, Z., Engelberg, J., & Gao, P. (2011). In search of attention. *Journal of Finance*, 66(5), 1461-1499.

Engelberg, J. E., & Parsons, C. A. (2011). The causal impact of media in financial markets. *Journal of Finance*, 66(1), 67-97.

Loughran, T., & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *Journal of Finance*, 66(1), 35-65.

Brogaard, J., & Detzel, A. (2015). The asset-pricing implications of government economic policy uncertainty. *Management Science*, 61(1), 3-18.

Da, Z., Engelberg, J., & Gao, P. (2015). The sum of all FEARS investor sentiment and asset prices. *Review of Financial Studies*, 28(1), 1-32.

Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring economic policy uncertainty. *Quarterly Journal of Economics*, 131(4), 1593-1636.

Ben-Rephael, A., Da, Z., & Israelsen, R. D. (2017). It depends on where you search: Institutional investor attention and underreaction to news. *Review of Financial Studies*, 30(9), 3009-3047.

Manela, A., & Moreira, A. (2017). News implied volatility and disaster concerns. *Journal of Financial Economics*, 123(1), 137-162. (key reading)

Calomiris, C. W., & Mamaysky, H. (2019). How news and its context drive risk and returns around the world. *Journal of Financial Economics*, 133(2), 299-336.

Hassan, T. A., Hollander, S., Van Lent, L., & Tahoun, A. (2019). Firm-level political risk: Measurement and effects. *Quarterly Journal of Economics*, 134(4), 2135-2202.

Cohen, L., Malloy, C., & Nguyen, Q. (2020). Lazy prices. *Journal of Finance*, 75(3), 1371-1415.

Engle, R. F., Giglio, S., Kelly, B., Lee, H., & Stroebel, J. (2020). Hedging climate change news. *Review of Financial Studies*, 33(3), 1184-1216. (key reading)

Gao, Z., Ren, H., & Zhang, B. (2020). Googling investor sentiment around the world. *Journal of Financial and Quantitative Analysis*, 55(2), 549-580.

Cookson, J. A., Niessner, M., & Schiller, C. (2022). Can social media inform corporate decisions? Evidence from merger withdrawals. *Evidence from Merger Withdrawals* (March 16, 2022).

Doh, T., Song, D., & Yang, S. K. (2022). Deciphering federal reserve communication via text analysis of alternative fomc statements. *Federal Reserve Bank of Kansas City Working Paper Forthcoming*.

Fisher, A., Martineau, C., & Sheng, J. (2022). Macroeconomic attention and announcement risk premia. *Review of Financial Studies*, 35(11), 5057-5093.

Liu, Y., & Matthies, B. (2022). Long-Run Risk: Is It There? *Journal of Finance*. 77(3), 1587-1633.

Sautner, Z., van Lent, L., Vilkov, G., & Zhang, R. (2023). Firm-level climate change exposure. *Journal of Finance*, forthcoming

Session 2. ESG in asset pricing

Hong, H., & Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. *Journal of Financial Economics*, 93(1), 15-36.

Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3), 621-640.

Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *Journal of Finance*, 72(4), 1785-1824.

Albuquerque, R., Koskinen, Y., & Zhang, C. (2019). Corporate social responsibility and firm risk: Theory and empirical evidence. *Management Science*, 65(10), 4451-4469.

Green, T. C., Huang, R., Wen, Q., & Zhou, D. (2019). Crowdsourced employer reviews and stock returns. *Journal of Financial Economics*, 134(1), 236-251.

Hartzmark, S. M., & Sussman, A. B. (2019). Do investors value sustainability? A natural experiment examining ranking and fund flows. *Journal of Finance*, 74(6), 2789-2837.

Choi, D., Gao, Z., & Jiang, W. (2020). Attention to global warming. *Review of Financial Studies*, 33(3), 1112-1145. (key reading)

Krueger, P., Sautner, Z., & Starks, L. T. (2020). The importance of climate risks for institutional investors. *Review of Financial Studies*, 33(3), 1067-1111.

Bolton, P., & Kacperczyk, M. (2021). Do investors care about carbon risk? *Journal of Financial Economics*, 142(2), 517-549.

Ilhan, E., Sautner, Z., & Vilkov, G. (2021). Carbon tail risk. *Review of Financial Studies*, 34(3), 1540-1571.

Pástor, L., Stambaugh, R. F., & Taylor, L. A. (2021). Sustainable investing in equilibrium. *Journal of Financial Economics*, 142(2), 550-571.

Pedersen, L. H., Fitzgibbons, S., & Pomorski, L. (2021). Responsible investing: The ESG-efficient frontier. *Journal of Financial Economics*, 142(2), 572-597.

Cao, J., Titman, S., Zhan, X., & Zhang, W. (2022). ESG preference, institutional trading, and stock return patterns. *Journal of Financial and Quantitative Analysis*, 1-58.

Pástor, L., Stambaugh, R. F., & Taylor, L. A. (2022). Dissecting green returns. *Journal of Financial Economics*, 146(2), 403-424.

Zhang, S. (2022). Carbon Premium: Is It There?. Available at SSRN.

Hsu, P. H., Li, K., & Tsou, C. Y. (2022). The pollution premium. *Journal of Finance*, forthcoming (key reading)

Session 3. Macro-finance in asset pricing

Jagannathan, R., & Wang, Z. (1996). The conditional CAPM and the cross-section of expected returns. *Journal of finance*, 51(1), 3-53.

Lettau, M., & Ludvigson, S. (2001). Consumption, aggregate wealth, and expected stock returns. *Journal of Finance*, 56(3), 815-849.

Duffee, G. R. (2005). Time variation in the covariance between stock returns and consumption growth. *Journal of Finance*, 60(4), 1673-1712.

Ait-Sahalia, Y., Parker, J. A., & Yogo, M. (2004). Luxury goods and the equity premium. *Journal of Finance*, 59(6), 2959-3004.

Bernanke, B. S., & Kuttner, K. N. (2005). What explains the stock market's reaction to Federal Reserve policy?. *Journal of finance*, 60(3), 1221-1257.

Boyd, J. H., Hu, J., & Jagannathan, R. (2005). The stock market's reaction to unemployment news: Why bad news is usually good for stocks. *Journal of Finance*, 60(2), 649-672.

Parker, J. A., & Julliard, C. (2005). Consumption risk and the cross section of expected returns. *Journal of Political Economy*, 113(1), 185-222.

Malloy, C. J., Moskowitz, T. J., & Vissing-Jørgensen, A. (2009). Long-run stockholder consumption risk and asset returns. *Journal of Finance*, 64(6), 2427-2479. (key reading)

Nagel, S., & Singleton, K. J. (2011). Estimation and evaluation of conditional asset pricing models. *Journal of Finance*, 66(3), 873-909.

van Binsbergen, J. V., Brandt, M., & Koijen, R. (2012). On the timing and pricing of dividends. *American Economic Review*, 102(4), 1596-1618.

Adrian, T., Etula, E., & Muir, T. (2014). Financial intermediaries and the cross-section of asset returns. *Journal of Finance*, 69(6), 2557-2596.

Roussanov, N. (2014). Composition of wealth, conditioning information, and the cross-section of stock returns. *Journal of Financial Economics*, 111(2), 352-380.

van Binsbergen, J. H., & Koijen, R. S. (2017). The term structure of returns: Facts and theory. *Journal of Financial Economics*, 124(1), 1-21.

He, Z., Kelly, B., & Manela, A. (2017). Intermediary asset pricing: New evidence from many asset classes. *Journal of Financial Economics*, 126(1), 1-35. (key reading)

Katz, M., Lustig, H., & Nielsen, L. (2017). Are stocks real assets? Sticky discount rates in stock markets. *Review of Financial Studies*, 30(2), 539-587.

Koijen, R. S., Lustig, H., & Van Nieuwerburgh, S. (2017). The cross-section and time series of stock and bond returns. *Journal of Monetary Economics*, 88, 50-69.

Greenwald, D. L., Lettau, M., & Ludvigson, S. C. (2019). How the wealth was won: Factors shares as market fundamentals (No. w25769). National Bureau of Economic Research.

Lettau, M., Ludvigson, S. C., & Ma, S. (2019). Capital share risk in US asset pricing. *Journal of Finance*, 74(4), 1753-1792.

Boons, M., Duarte, F., De Roon, F., & Szymanowska, M. (2020). Time-varying inflation risk and stock returns. *Journal of Financial Economics*, 136(2), 444-470.

Fang, X., Liu, Y., & Roussanov, N. (2022). Getting to the core: Inflation risks within and across asset classes (No. w30169). National Bureau of Economic Research.

Session 4. Low-Risk anomalies

Jensen, M. C., Black, F., & Scholes, M. S. (1972). The capital asset pricing model: Some empirical tests (“\Session 4_1_Low_Risk\Papers\bab_equity”).

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 (“\Session 4_1_Low_Risk\Papers\ivol_equity”)

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 (“\Session 4_1_Low_Risk\Papers\ivol_equity”)

Fu, F. (2009). Idiosyncratic risk and the cross-section of expected stock returns. *Journal of Financial Economics*, 91(1), 24-37 (“\Session 4_1_Low_Risk\Papers\ivol_equity”).

Bali, T. G., Cakici, N., & Whitelaw, R. F. (2011). Maxing out: Stocks as lotteries and the cross-section of expected returns. *Journal of Financial Economics*, 99(2), 427-446 (“\Session 4_1_Low_Risk\Papers\ivol_equity”). (key reading)

Frazzini, A., & Pedersen, L. H. (2014). Betting against beta. *Journal of Financial Economics*, 111(1), 1-25 (“\Session 4_1_Low_Risk\Papers\bab_equity”).

Guo, H., Kassa, H., & Ferguson, M. F. (2014). On the relation between EGARCH idiosyncratic volatility and expected stock returns. *Journal of Financial and Quantitative Analysis*, 49(1), 271-296 (“\Session 4_1_Low_Risk\Papers\ivol_equity”).

Stambaugh, R. F., Yu, J., & Yuan, Y. (2015). Arbitrage asymmetry and the idiosyncratic volatility puzzle. *Journal of Finance*, 70(5), 1903-1948 (“\Session 4_1_Low_Risk\Papers\ivol_equity”).

Bali, T. G., Brown, S. J., Murray, S., & Tang, Y. (2017). A lottery-demand-based explanation of the beta anomaly. *Journal of Financial and Quantitative Analysis*, 52(6), 2369-2397 (“\Session 4_1_Low_Risk\Papers\bab_equity”).

Schneider, P., Wagner, C., & Zechner, J. (2020). Low-Risk Anomalies?. *Journal of Finance*, 75(5), 2673-2718 (“\Session 4_1_Low_Risk”). (key reading)

Novy-Marx, R., & Velikov, M. (2022). Betting against betting against beta. *Journal of Financial Economics*, 143(1), 80-106 (“\Session 4_1_Low_Risk\Papers\bab_equity”).

Sessions 4 and 5. Institutional investors

Coval, J. D., & Moskowitz, T. J. (2001). The geography of investment: Informed trading and asset prices. *Journal of political Economy*, 109(4), 811-841.

Gemmill, G., & Thomas, D. C. (2002). Noise trading, costly arbitrage, and asset prices: Evidence from closed-end funds. *The Journal of Finance*, 57(6), 2571-2594.

Pástor, L., & Stambaugh, R. F. (2002). Investing in equity mutual funds. *Journal of Financial Economics*, 63(3), 351-380.

Agarwal, V., & Naik, N. Y. (2004). Risks and portfolio decisions involving hedge funds. *The Review of Financial Studies*, 17(1), 63-98.

Aragon, G. O. (2007). Share restrictions and asset pricing: Evidence from the hedge fund industry. *Journal of financial economics*, 83(1), 33-58.

Greenwood, R., & Nagel, S. (2009). Inexperienced investors and bubbles. *Journal of Financial Economics*, 93(2), 239-258.

Barras, L., Scaillet, O., & Wermers, R. (2010). False discoveries in mutual fund performance: Measuring luck in estimated alphas. *Journal of Finance*, 65(1), 179-216.

Bali, T. G., Brown, S. J., & Caglayan, M. O. (2014). Macroeconomic risk and hedge fund returns. *Journal of Financial Economics*, 114(1), 1-19.

Berk, J. B., & Van Binsbergen, J. H. (2015). Measuring skill in the mutual fund industry. *Journal of financial economics*, 118(1), 1-20.

Barber, B. M., Huang, X., & Odean, T. (2016). Which factors matter to investors? Evidence from mutual fund flows. *The Review of Financial Studies*, 29(10), 2600-2642.

Berk, J. B., & Van Binsbergen, J. H. (2016). Assessing asset pricing models using revealed preference. *Journal of Financial Economics*, 119(1), 1-23.

Choi, D., Kahraman, B., & Mukherjee, A. (2016). Learning about mutual fund managers. *The Journal of Finance*, 71(6), 2809-2860.

Goldstein, I., Jiang, H., & Ng, D. T. (2017). Investor flows and fragility in corporate bond funds. *Journal of Financial Economics*, 126(3), 592-613.

Boguth, O., & Simutin, M. (2018). Leverage constraints and asset prices: Insights from mutual fund risk taking. *Journal of Financial Economics*, 127(2), 325-341.

Ben-Rephael, A., Choi, J., & Goldstein, I. (2021). Mutual fund flows and fluctuations in credit and business cycles. *Journal of financial economics*, 139(1), 84-108.

Han, X., Roussanov, N. L., & Ruan, H. (2021). Mutual fund risk shifting and risk anomalies. *Jacobs Levy Equity Management Center for Quantitative Financial Research Paper*.

Ben-David, I., Li, J., Rossi, A., & Song, Y. (2022). What do mutual fund investors really care about?. *The Review of Financial Studies*, 35(4), 1723-1774. (key reading)

Jiang, H., Li, Y., Sun, Z., & Wang, A. (2022). Does mutual fund illiquidity introduce fragility into asset prices? Evidence from the corporate bond market. *Journal of Financial Economics*, 143(1), 277-302.

Session 5. Political finance in asset pricing

Santa-Clara, P., & Valkanov, R. (2003). The presidential puzzle: Political cycles and the stock market. *Journal of Finance*, 58(5), 1841-1872.

Goldman, E., Rocholl, J., & So, J. (2009). Do politically connected boards affect firm value?. *Review of Financial Studies*, 22(6), 2331-2360.

Cooper, M. J., Gulen, H., & Ovtchinnikov, A. V. (2010). Corporate political contributions and stock returns. *Journal of Finance*, 65(2), 687-724.

- Boutchkova, M., Doshi, H., Durnev, A., & Molchanov, A. (2012). Precarious politics and return volatility. *Review of Financial Studies*, 25(4), 1111-1154.
- Kim, C. F., Pantzalis, C., & Park, J. C. (2012). Political geography and stock returns: The value and risk implications of proximity to political power. *Journal of Financial Economics*, 106(1), 196-228.
- Belo, F., Gala, V. D., & Li, J. (2013). Government spending, political cycles, and the cross section of stock returns. *Journal of Financial Economics*, 107(2), 305-324. (394)
- Pástor, L., & Veronesi, P. (2013). Political uncertainty and risk premia. *Journal of Financial Economics*, 110(3), 520-545.
- Addoum, J. M., & Kumar, A. (2016). Political sentiment and predictable returns. *Review of Financial Studies*, 29(12), 3471-3518.
- Gorbatikov, E., van Lent, L., Naik, N. Y., Sharma, V., & Tahoun, A. (2019). Is firm-level political exposure priced?.
- Borup, D., Hansen, J., Lienggaard, B., & Schütte, E. C. M. (2020). Quantifying investor narratives and their role during COVID-19. Available at SSRN 3752116.
- Brogaard, J., Dai, L., Ngo, P. T., & Zhang, B. (2020). Global political uncertainty and asset prices. *Review of Financial Studies*, 33(4), 1737-1780.
- Brown, J. R., & Huang, J. (2020). All the president's friends: Political access and firm value. *Journal of Financial Economics*, 138(2), 415-431.
- Pástor, L., & Veronesi, P. (2020). Political cycles and stock returns. *Journal of Political Economy*, 128(11), 4011-4045.
- Liu, Y., & Shaliastovich, I. (2022). Government policy approval and exchange rates. *Journal of Financial Economics*, 143(1), 303-331.
- Chen, Z., Da, Z., Huang, D., & Wang, L. (2023). Presidential economic approval rating and the cross-section of stock returns. *Journal of Financial Economics*, 147(1), 106-131. (key reading)

6. Details on the two assignments

Assignment 1. Replication Exercise (Send your code and report to TA)

- 1) Create an account on WRDS. Read the Ang, Hodrick, Xing, and Zhang (JF, 2006) paper (AHXZ).
- 2) Try to replicate as closely many columns as possible in AHXZ Table I using the same sample period, data filters, and the old VIX.
- 3) Try to replicate as closely many columns as possible in AHXZ Table VI using the same sample period and data filters. Do Panel A first and then Panel B if you can.

4) Try to compute the returns for the five quintile (and 5-1) portfolios in Tables I and IV on a new out-of-sample period starting when AHXZ's sample ends and ending when the WRDS data ends.

5) Plot the cumulative log returns on the 5-1 strategy in Table I and on the 5-1 strategies in Table VI. Add the out-of-sample 5-1 returns in 4) to the cumulative log return graphs.

Assignment 2. Referee report (Send your letter to the instructor)

1) Choose any asset pricing paper among the 2024 AFA program list

(https://www.aeaweb.org/conference/2024/program?q=eNqrVipOTSxKzICyqgayiosz8_NCKgtSkbhKVkqGSrU6SonFxfnJQI6pko5SSWpRLpAJZKUkVkiYJZm5qRBWWWZqOUh_UUEBSLmBUm1tLVwwulsfeQ%2C%2C).

Or, 2023 WFA list (<https://westernfinance-portal.org/program/2023/WFA.2023.program.preconf.pdf>)

2) Write a cover letter to the editor and a referee report. I will provide examples of referee reports.