

ECO759 FINANCIAL ECONOMICS

By Cheolbeom PARK

This course provides students with the knowledge of modern financial models to understand the determination of asset prices. Main asset pricing models covered in this course are Capital Asset Pricing Model (CAPM) and Consumption-based Capital Asset Pricing Model (CCAPM). This course also discusses empirical studies that are testing and applying these models. For this purpose, it will make use of time series econometrics and regular problem sets consist of analytic questions as well as a series of programming exercise in MATLAB (a matrix algebra program).

Optional Textbooks:

Bodie, Z., A. Kane, and A. Marcus, *Investments*, 8th edition, McGraw Hill, 2009.

Campbell, J. Y., A. W. Lo, and A. C. MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997.

Cochrane, J. H., *Asset Pricing*, revised edition, Princeton University Press, 2005.

Danthine, J-P., and J. B. Donaldson, *Intermediate Financial Theory*, 2nd edition, Prentice Hall, 2005.

Enders, W., *Applied Econometric Time Series*, 2nd edition, Wiley, 2004

Hamilton, J. D., *Time Series Analysis*, Princeton University Press, 1994.

Lutkepohl, H., *Introduction to Multiple Time Series Analysis*, 2nd edition, Springer-Verlag, 1993.

Contact Information:

E-mail: cbpark_kjs@korea.ac.kr

Grade:

Term paper & Presentation	30%
Problem Sets	30%
Final exam	40%

Contents:

I. Introduction: Financial Assets, Return and Risk

BKM: Chapters 1-5

Cochrane: Chapter 1.1-1.3

DD: Chapter 1-2

II. Static Portfolio Choice and Static Asset Pricing Models

a) Portfolio Selection Models

BKM: Chapters 6-8

DD: Chapter 5-6

Markowitz, H.M., "Portfolio Selection," *Journal of Finance* 7 (1952): 77-91.

Tobin, J., "Liquidity Preference as Behavior towards Risk," *Review of Economic Studies* 25 (1958): 65-86.

b) Capital Asset Pricing Model (CAPM)

BKM: Chapter 9

DD: Chapter 7

Sharpe, W., "Capital Asset Prices: A Theory of Market Equilibrium," *Journal of Finance* 19 (1964): 425-442.

Lintner, J., "The Valuation of Risky Assets and the Selection of Risky Investment in Stock Portfolios and Capital Budgets," *Review of Economics and Statistics* 47 (1965): 13-37.

Mossin, J., "Equilibrium in a Capital Asset Market," *Econometrica* 35 (1966): 768-783.

III. Consumption CAPM I

DD: Chapter 9

Cochrane: Chapter 1.4, Chapter 21

Lucas, R. E., "Asset Pricing in a Exchange Economy," *Econometrica* 46 (1978): 1429-1445.

Shiller, R., "Consumption, Asset Markets, and Macroeconomic Fluctuations," *Carnegie Rochester Conference Series on Public Policy* 17 (1982): 203-238.

IV. Stock Return Predictability I

a) Tests of Random Walk Hypothesis

CLM: Chapter 2.1-2.4

Fama, E. F., "Efficient Capital Markets: A Review of Theory and Empirical Work," *Journal of Finance* 25 (1970): 383-417.

Fama, E. F., "Efficient Capital Markets II," *Journal of Finance* 46 (1991): 1575-1617.

Box, G., and D. Pierce, "Distribution of Residual Autocorrelations in Autoregressive-Integrated Moving Average Time Series Models," *Journal of the American Statistical Association*, 65 (1970): 1509-1526.

Lo, A., and A. C. MacKinlay, "Stock Market Prices Do Not Follow Random Walk: Evidence from a Simple Specification Test," *Review of Financial Studies* 1 (1988): 41-66.

b) Unit Root Tests and Application

CLM: Chapter 2.7

Hamilton: Chapters 17, 19

Meese, R. A., and K. Rogoff, "Empirical Exchange Rate Models of the Seventies: Do They Fit Out of Sample?" *Journal of International Economics* 14 (1983): 3-24.

Edison, H.J., J. E. Gagnon, and W. R. Melick, "Understanding the Empirical Literature on Purchasing Power Parity: the Post-Bretton Woods Era," *Journal of International Money and Finance* 16 (1997): 1-17.

Im, K.S., M.H. Pesaran, and Y. Shin, "Testing for Unit Roots in Heterogeneous Panels," *Journal of Econometrics* 115 (2003): 53-74.

V. Consumption CAPM II – Equity Premium Puzzle

DD: Chapter 9

Cochrane: Chapter 1.4, Chapter 21

- Mehra, R. and E. Prescott, "The Equity Premium Puzzle," *Journal of Monetary Economics* 15 (1985): 145-161.
- Rietz, T., "The Equity Risk Premium: A Solution?" *Journal of Monetary Economics* 21 (1988): 117-132.
- Jorion, P., and W.N. Goetzmann, "Global Stock Markets in the Twentieth Century," *Journal of Finance* 54 (1999): 953-980.
- Mankiw, N. and S. Zeldes, "The Consumption of Stockholders and Non-Stockholders," *Journal of Financial Economics* 29 (1991): 97-112.
- Ait-Sahalia, Y., J. Parker, and M. Yogo, "Luxury Goods and the Equity Premium," *Journal of Finance* 59 (2004): 2959-3004.
- Luttmer, E., "What Levels of Fixed Costs Can Reconcile Consumption and Stock Returns," *Journal of Political Economy* 107 (1999): 969-997.
- Campbell, J. Y. and J. H. Cochrane "By Force of Habit: A Consumption-Based Expectation of Aggregate Stock Market Behavior," *Journal of Political Economy* 107 (1999): 205-251.
- Cecchetti, S., P.-S. Lam, and N. Mark, "Asset Pricing with Distorted Beliefs: Are Equity Returns Too Good to be True?" *American Economic Review* 90 (2000): 787-805.
- Bansal, R., and A. Yaron, "Risks for the Long Run," *Journal of Finance* 59 (2004), 1481-1509.
- Bansal, R., R. Dittmar, and C. Lundblad, "Consumption, Dividends, and the Cross-Section of Equity Returns," *Journal of Finance* 60 (2005), 1639-1672.
- Barro, R. (2006) Rare disasters and asset markets in the twentieth century. *Quarterly Journal of Economics*, 121, 823-866.

VI. Stock Return Predictability II

a) Predictive Regression

CLM: Chapter 7.1, 7.2.1

Cochrane: Chapter 20.1

Hamilton: Chapter 10.5

Hodrick, R. J., "Dividend yields and expected stock returns: Alternative procedures for inference and measurement," *Review of Financial Studies*, 5 (1992), 357-386.

Nelson, C. R., and M. J. Kim, "Predictable stock returns: The role of small sample bias," *Journal of Finance*, 48 (1993), 641-661.

Jorion, P., and W.N. Goetzmann, "Testing the Predictive Power of Dividend Yields," *Journal of Finance*, 48 (1993), 643-679.

Wolf, M., "Stock returns and dividend yields revisited: A new way to look at an old problem," *Journal of Business and Economic Statistics*, 18 (2000), 18-30.

Goyal, A., and Welch, I., "A comprehensive look at the empirical performance of the equity premium prediction," *Review of Financial Studies*, 21 (2008), 1455-1508.

Cambell, J. Y., and S. Thompson, "Predicting excess stock returns out of sample: Can anything beat the historical average?" *Review of Financial Studies* 21 (2008), 1509-1531.

Lettau, M., and S. Van Nieuwerburgh, "Reconciling the return predictability evidence," *Review of Financial Studies* 21 (2008), 1607-1652.

Cochrane, J. H., "The dog that did not bark: A defense of return predictability,"

- Review of Financial Studies* 21 (2008), 1533–1575.
- Lettau, M., and S. C. Ludvigson, “Consumption, Aggregate Wealth, and Expected Stock Returns,” *Journal of Finance* 56 (2001), 815-849.
- Lettau, M., and S. C. Ludvigson, “Expected returns and expected dividend growth,” *Journal of Financial Economics* 76 (2005), 583–626.
- Robertson, D., and S. Wright “Dividends, total cashflow to shareholders and predictive return regressions,” *Review of Economics and Statistics*, 88 (2006), 91-99.
- Boudoukh, J., R. Michaely, M. Richardson, and M. Roberts “On the importance of measuring payout yield: Implications for empirical asset pricing,” *Journal of Finance*, 62 (2007), 877-915.
- Kim, C.-J. and C. Park “Disappearing Dividends: Implications for the Dividend-Price Ratio and Return Predictability,” *Journal of Money, Credit and Banking* (2013) 933-952.
- Menzly, L., T. Santos, and P. Veronesi “Understanding Predictability,” *Journal of Political Economy* 112 (2004), 1-47.
- Chen, L., “On the reversal of return and dividend growth predictability: a tale of two period.” *Journal of Financial Economics* 92, (2009) 128-151.
- Rangvid, J., Schmeling, M., and Schrimpf, A., “Dividend predictability around the world.” *Journal of Financial and Quantitative Analysis*, (2013) forthcoming.

b) Vector Autoregressive Methods

CLM: Chapter 7.2.3

- Campbell, J. Y. and R. J. Shiller, “The Dividend-Price Ratio and Expectations of Future Dividends and Discount Factors,” *Review of Financial Studies* 1 (1988): 195-227.
- Campbell, J. Y. and R. J. Shiller, “Stock Prices, Earnings, and Expected Dividends,” *Journal of Finance* 43 (1988): 661-676.
- Gourinchas, P.-O. and Rey, H. (2008) “International Financial Adjustment.” *Journal of Political Economy* 115, 665-773.

VII. Exchange Rate Models

- Dornbusch, R. “Expectations and Exchange Rate Dynamics,” *Journal of Political Economy*, 84 (1976), 1161-1176.
- Lewis, K. “Puzzles in International Financial Markets,” in Grossman and Rogoff (eds.): *Handbook of International Economics*, vol. III (1995), 1913-1950
- Meese, R. A. and Rogoff, K. (1983), "Empirical Exchange Rate Models of the Seventies: Do They Fit Out of Sample?" *Journal of International Economics*, 14, 3-24.
- Mark, N.C. (1995), “Exchange rates and fundamentals: evidence on long-horizon predictability” *American Economic Review*, 85 (1), 201–218.
- Kilian, L. (1999), “Exchange Rates and Monetary Fundamentals: What Do We Learn from Long-Horizon Regressions?” *Journal of Applied Econometrics*, 14, 491-510.
- Engel, C. and West, K.D. (2005), “Exchange Rates and Fundamentals,” *Journal of Political Economy*, 113:3, 485-517.
- Bacchetta, P. and van Wincoop, E. (2009), “On the Unstable Relationship between Exchange Rates and Macroeconomic Fundamentals,” NBER

- Working Paper 15008.
- Engel, C. “Exchange Rates and Interest Parity”, in Gopinath, Helpman, and Rogoff (eds.): *Handbook of International Economics*, vol. IV (forthcoming).
- Engel, C. and West, K.D. (2006) “Taylor Rules and the Duetschemark-Dollar Real Exchange Rate.” *Journal of Money, Credit, and Banking* 38, 1175-1194.
- Mark, N. C. (2009) “Changing Monetary Policy Rules, Learning, and Real Exchange Rate Dynamics.” *Journal of Money, Credit, and Banking* 41, 1047-1070
- Molodtsova, T. and Papell, D. H. (2009) “Out-of-sample Exchange Rate Predictability with Taylor Rule Fundamentals.” *Journal of International Economics* 77, 167-180.
- Park, C. and Park, S. (2013) “Exchange Rate Predictability” *Journal of International Money and Finance*
- Farhi, E. and Gabaix, X. (2016). Rare disasters and exchange rates. *Quarterly Journal of Economics*, 131, 1-51.

VIII. Structural VAR Models in Financial Economics

Hamilton: Chapter 11

Lutkepohl: Chapter 2.3

Sims, C., “Macroeconomics and Reality,” *Econometrica* 48 (1980): 1-48.

Blanchard, O.J., and D. Quah, “The Dynamic Effects of Aggregate Demand and Supply Disturbances,” *American Economic Review* 79 (1989): 655-673.

Hess, P. J., and B.-S. Lee, “Stock Returns and Inflation with Supply and Demand Disturbances,” *Review of Financial Studies* 12 (1999): 1203-1218.

Kilian, L., and C. Park, “The Impact of Oil Price Shocks on the US Stock Market,” *International Economic Review* 50 (2009): 1267-1287.

Eichenbaum, M., and C. Evans, “Some Empirical Evidence on the Effects of Shocks to Monetary Policy on Exchange Rates,” *Quarterly Journal of Economics*, 110 (1995), 975-1010.

Bjørnland, H., “Monetary Policy and Exchange Rate Overshooting: Dornbusch was Right After All,” *Journal of International Economics* 79 (2009) 64-77.

Term Paper

The purpose of the term paper is to provide you with an opportunity to demonstrate your understanding of some topic in this course. The paper is expected to be no more than twenty (20) pages (font size 12, typed, and double-spaced) in length (including everything). The format of the term paper must be suitable for publication in an academic journal. Term papers that do not meet this standard will not be accepted. The topic will be assigned in class. Term paper must not be co-authored. Students are required to submit the final draft by June 10th, 2020.

Problem Sets

Some questions in regular problem sets will consist mainly of a series of programming exercise in MATLAB (a matrix algebra program). Problem sets may be prepared in groups, but must be handed in individually.