

Advanced Financial Economics

Spring 2015 (3rd module) – Syllabus

Instructor: SungBin Sohn
Class Hours: Tuesdays and Fridays 1030am-1220pm in Room 313
Office Hours: Thursdays 10-11:30am in Room 748, or by appointment
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Teaching Assistant: TBA

Course Description

This course studies the topics in finance in an advanced level. It begins with static portfolio choice problems and reviews the basics of asset pricing theory (SDF, Euler equation, complete/incomplete market, etc.). The course then turns to the capital asset pricing model (CAPM) and consumption-based asset pricing model, and develops dynamic portfolio choice problems and equilibrium asset pricing theories. Finally, the course discusses market microstructure and behavioral asset pricing. The emphasis of the course is theoretical, but empirical applications (using US and Chinese data) are also covered. In the end of the module, students are expected to have insights and intuitions about global financial phenomena and to be able to critically think in various economic situations. See the course outline for details.

The textbook for the course is

John H. Cochrane (2001), *Asset Pricing*, Princeton University Press.

In addition, lecture notes and the suggested reading list are provided.

Requirements and Grading

Requirements for the course include attending lectures, several problem sets, a group presentation, a midterm exam and a final exam.

1. Attendance: Since the course is cumulative in the sense that each lecture builds on previous ones, full attendance is required. I take roll randomly throughout a module. If you're absent without my pre-approval, your score will be downgraded.
2. Homework assignments: You are encouraged to work in groups. However, you must turn in an individual solution. Some of the assignments could contain computational exercises. Late submission is unacceptable and will not be graded. The solution is to be provided for each homework assignment.
3. Group presentation: I will ask you to choose your preferred topic(s) from the paper list I will distribute later. Then, several groups are formed based on your preference. Students in each group are required to select a group leader, read and understand the paper, and present (teach) it to your classmates. Each presentation is 25-minute long (including Q&A's) and should contain the summary of the paper and some critical assessment. The presentations are scheduled on April 28 (Tuesday) and 29 (Wednesday).
4. Exams: Exams test whether you are skilled in problem-solving and critical thinking. Past exams are provided for your reference. The midterm is scheduled on March 27, Friday in class (1030am-1220pm), and the final exam is on May 4, Monday (330-520pm).

Throughout the class, knowledge of master-level microeconomics and undergrad-level econometrics is assumed (Financial Economics is the prerequisite course). Plagiarism or any dishonesty is strictly punished.

The grading of the course is broken down to the following components:

Attendance and paper presentation	20%
Homework assignments	20%
Midterm exam	30%
Final exam	30%

Email policies

I strongly encourage you to ask questions during lectures and office hours. If you have special needs to reach me outside the lectures or office hours, however, you may email me. I will try to respond to your email in two business days. If you don't get my response within two business days, please send me a reminder email. When you email me, please prefix the subject header [AFE] in order to make your email distinct from others. Optionally, send a brief self-introductory email to me with your photo.

Course Outline and References

Please note that the references and the schedule of topics are likely to be updated as the course evolves.

Week 1

- Introduction; Expected utility and risk aversion; Portfolio choice under uncertainty

Cochrane, Chapter 1, 2, 3.

Mas-Colell, Winston and Green (1995), *Microeconomic Theory*, Oxford University Press, Chapter 6.

Summers, Lawrence (1985), "On Economics and Finance," *Journal of Finance* 40.

Wachter, Jessica A., and Motohiro Yogo (2010), "Why Do Household Portfolio Shares Rise in Wealth?," *Review of Financial Studies* 23.

Week 2

- Euler equation and the stochastic discount factor; Complete/incomplete markets; Volatility bounds

Campbell, John Y. (2003), "Consumption Based Asset Pricing," in George Constantinides, Milton Harris and Rene Stulz eds., *Handbook of the Economics of Finance*, North-Holland, Amsterdam.

Cochrane, Chapter 4, 5, 6, 7, 8.

Cochrane, John H. (1991), "A Simple Test of Consumption Insurance," *Journal of Political Economy* 99.

Hansen, Lars P. and Ravi Jagannathan (1991), "Implications of Security Market Data for Models of Dynamic Economies," *Journal of Political Economy* 99.

Mankiw, N. Gregory and Stephen P. Zeldes (1991), "The Consumption of Stockholders and Nonstockholders," *Journal of Finance* 29.

Week 3

- Factor pricing models and the CAPM; Cross-sectional asset pricing; Anomalies

Campbell, John Y. and Tuomo Vuolteenaho (2004), "Bad Beta, Good Beta," *American Economic Review* 94.

Campbell, John Y, Christopher Polk, and Tuomo Vuolteenaho (2009), "Growth or Glamour? Fundamentals and Systematic Risk in Stock Returns," *Review of Financial Studies* 22.

Cochrane, Chapter 9, 10, 11, 12 and 20.2

De Bondt, Werner F. M., and Richard Thaler (1985), "Does the Stock Market Overreact?," *Journal of Finance* 40.

Fama, Eugene and Kenneth R. French (1996), "Multifactor Explanations for Asset Pricing Anomalies," *Journal of Finance* 51.

Jagannathan, Ravi, and Yong Wang (2007), "Lazy Investors, Discretionary Consumption, and the Cross-section of Stock Returns," *Journal of Finance* 62.

Lakonishok, Josef, Andrei Shleifer, and Robert Vishny (1994), "Contrarian Investment, Extrapolation and Risk," *Journal of Finance* 49.

Week 4

- Present value relationships; Stock return predictability

Campbell, John Y and Robert J. Shiller (1988), "The Dividend-Price Ratio and Expectations of Future Dividends and Discount Factors," *Review of Financial Studies* 1.

Campbell, John Y and Robert J. Shiller (1998), "Valuation Ratios and the Long-Run Stock Market Outlook," *Journal of Portfolio Management* 24.

Cochrane, Chapter 20.1

Cochrane, John H. (1991), "Explaining the Variance of Price-Dividend Ratios," *Review of Financial Studies* 5.

- Midterm

Week 5

- Solving dynamic portfolio choice and consumption problems; Equity premium/ riskfree/ volatility puzzle

Lucas, Robert E. (1978), "Asset Prices in an Exchange Economy," *Econometrica* 46.

Stokey, Nancy L. and Robert E. Lucas Jr., with Edward C. Prescott (1989), *Recursive Methods in Economic Dynamics*, Harvard University Press.

McGrattan, Ellen R. and Edward C. Prescott (2003), "Average Debt and Equity Returns: Puzzling?," *American Economic Review* 93.

Mehra, Rajnish and Edward C. Prescott, "The Equity Premium: A Puzzle," *Journal of Monetary Economics* 15.

Shiller, Robert J. (1981), "Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?," *American Economic Review* 71.

Week 6

- Suggested solutions to puzzles

Ait-Sahalia, Yacine, Jonathan A. Parker, and Motohiro Yogo (2004), "Luxury Goods and the Equity Premium," *Journal of Finance* 59.

Bansal, Ravi and Amir Yaron (2004), "Risks for the Long Run: A Potential Resolution of Asset Pricing Puzzles," *Journal of Finance* 59.

Barro, Robert (2006), "Rare Disasters and Asset Markets in the Twentieth Century,"

Quarterly Journal of Economics 121.

Campbell, John Y. and John H. Cochrane (1999), "By Force of Habit: A Consumption-Based Explanation of Aggregate Stock Market Behavior," *Journal of Political Economy* 107.

Constantinides, George M. and Durrell Duffie (1996), "Asset Pricing with Heterogeneous Consumers," *Journal of Political Economy* 104.

Epstein, Lawrence and Stanley Zin, (1989), "Substitution, Risk Aversion, and the Temporal Behavior of Consumption and Asset Returns: A Theoretical Framework," *Econometrica* 57.

Grossman, Sanford J. and Guy Laroque (1990), "Asset Pricing and Optimal Portfolio Choice in the Presence of Illiquid Durable Consumption Goods," *Econometrica* 58.

Vissing-Jorgensen, Anette (2002), "Limited Asset Market Participation and the Elasticity of Intertemporal Substitution," *Journal of Political Economy* 110.

Week 7

- Information aggregation and market microstructure; Limits to arbitrage and behavioral finance

Cohen, Lauren, Andrea Frazzini and Christopher Malloy (2008), "The Small World of Investing: Board Connections and Mutual Fund Returns," *Journal of Political Economy* 116.

Grossman, Sanford and Joseph Stiglitz (1980), "On the Impossibility of Informationally Efficient Markets," *American Economic Review* 70.

Stein, Jeremy (2008), "Conversations among competitors," *American Economic Review* 98.

Abreu, Dilip and Markus Brunnermeier (2003), "Bubble and Crashes," *Econometrica* 71.

DeLong J. Bradford, Andrei Shleifer, Lawrence Summers and Robert Waldmann (1990), "Noise Trader Risk in Financial Markets," *Journal of Political Economy* 98.

Froot, Kenneth A., Emil Dabora (1999), "How are Stock Prices Affected by the Location of Trade?," *Journal of Financial Economics* 53.

Hong, Harrison and Jeremy Stein (1999), "A Unified Theory of Underreaction, Momentum Trading and Overreaction in Asset Markets," *Journal of Finance* 54.

Shleifer, Andrei and Robert Vishny (1997), "The Limits of Arbitrage," *Journal of Finance* 52.

Week 8

- Micro evidence about consumption and portfolio choice; Mortgage backed securities

Ameriks, John, Andrew Caplin and John Leahy (2003), "Wealth Accumulation and the Propensity to Plan," *Quarterly Journal of Economics* 118.

Calvet, Laurent E., John Y. Campbell, and Paolo Sodini (2007), "Down or Out: Assessing the Welfare Costs of Household Investment Mistakes," *Journal of Political Economy* 115.

Diamond, Douglas W. and Phillip H. Dybvig (1983), "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy* 91.

Hurst, Erik, "Grasshoppers, Ants, and Pre-Retirement Wealth: A Test of Permanent Income Consumers," *NBER Working Paper No. 10098*.

Johnson, David S., Jonathan A. Parker and Nicholas S. Souleles, "Household Expenditure and the Income Tax Rebates of 2001," *NBER Working Paper No. 10784*.

Week 9

- Paper presentation

- Course review