

# Advanced Financial Economics

Spring 2014 (3<sup>rd</sup> module) – Syllabus

**Instructor:** SungBin Sohn  
**Class Hours:** Mondays and Thursdays 3:30-5:20pm in Room 229  
**Office Hours:** Wednesdays 10-11:30am in Room 748, or by appointment  
**Email:** [sungbin.sohn@phbs.pku.edu.cn](mailto:sungbin.sohn@phbs.pku.edu.cn)  
**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 are also covered. 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. 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. As for 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. As for the presentation, you should form a group and present a paper from the list I will distribute later. All members in the group should read the paper and understand its contents. Each presentation is 25-minute long (including Q&A's) and should contain the summary of the paper and some critical assessment. 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 (March 13 in class)	30%
Final (April 21 or 22)	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. Send a self-introductory email to me (no longer than 3 lines but 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**

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.

##### **- Equity premium/ riskfree/ volatility puzzle**

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 Durrel 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**

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.

### **- Limits to arbitrage and behavioral finance**

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**