

# FIN 526/ECON581 Empirical Asset Pricing Module 4, 2015-2016

## Course Information

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**Instructor: Hyun Joong Im**

Office: PHBS Building, Room 645

Phone: 86-755-2603-3627

Email: [hyun.im@phbs.pku.edu.cn](mailto:hyun.im@phbs.pku.edu.cn)

Office Hour: Wednesdays 4:00-6:00

**Teaching Assistant: Janghoon Shon**

Phone: 86-186-0103-6794

Email: [sunzhuangxun@pku.edu.cn](mailto:sunzhuangxun@pku.edu.cn)

**Classes:**

Lectures: Tuesdays and Fridays, 3:30-2:20

Venue: PHBS Building, Room TBA

**Course Website:**

Course materials will be distributed in the class.

## 1. Course Description

### 1.1 Context

**Course overview:**

The objective of this course is to read and understand scientific papers in empirical asset pricing. This course will focus on selected empirical papers regarding various asset pricing issues as well as basic research methodologies used in empirical asset pricing. Any empirical research should be based on theoretical foundations, so this course will explore selected theoretical models upon which empirical applications are based. The goal of this course is to combine econometrics, micro- and macro-economics, with a view to understanding, interpreting and predicting movements in stock prices.

**Prerequisites:**

Advanced Econometrics I

### 1.2 Textbooks and Reading Materials

(1) My recommended text books are as follows. You must buy these two books.

- John H. Cochrane, "**Asset Pricing**," Princeton University Press, 2001
- John Y. Campbell, Andrew Lo, and A. Craig Mackinlay, "**The Econometrics of Financial Markets**," Princeton University Press, 1997

(2) In addition to the textbooks, I recommend a number of academic papers including the following survey articles.

- Summers, Lawrence H., "On Economics and Finance," *Journal of Finance* 40: 633-635, July 1985.
- Cochrane, John, 1999, "New Facts in Finance," *Economic Perspectives* XXIII (3) Third quarter (Federal Reserve Bank of Chicago).
- Campbell, John Y., "Asset Pricing at the Millennium," *Journal of Finance* 55: 1515-1567, August 2000.
- Hirshleifer, David, 2001, "Investor Psychology and Asset Pricing," *Journal of Finance*, 56: 1533-1598.

(3) The following shows the list of chapters and papers for each topic to be covered in this course.

### **1) The Capital Asset Pricing Model**

- \*Cochrane Ch.12,15
- \*Campbell, Lo and MacKinlay, Ch.5
- Fama, Eugene F. and James D. MacBeth, 1973, "Risk, Return, and Equilibrium: Empirical Tests", *Journal of Political Economy*, 81(3), 607-636.
- Gibbons, Michael, Stephen Ross, and Jay Shanken, 1989, "A Test of the Efficiency of a Given Portfolio," *Econometrica* 57: 1121-1152.
- Shanken, Jay, 1992, "On the Estimation of Beta-pricing Models," *Review of Financial Studies*, 5, 1-33.

### **2) The Cross-Section of Expected Returns and Multifactor Models**

- \*Cochrane Ch.20.2
- \*Jegadeesh, Narasimhan and Sheridan Titman, 2001, "Profitability of Momentum Strategies: An Evaluation of Alternative Explanations," *Journal of Finance*, 56:2, 699-720.
- Fama, Eugene and Kenneth R. French, 1996, "Multifactor Explanations of Asset Pricing Anomalies," *Journal of Finance* 51:55-84.
- \*Daniel, Kent, Sheridan Titman and K.C. John Wei, 2001, "Explaining the Cross-Section of Stock Returns in Japan: Factors or Characteristics?" *Journal of Finance*, 56(2), p.743-766.
- Jagannathan, R., Wang, Z., 1996, "The Conditional CAPM and the Cross-Section of Expected Returns," *Journal of Finance*, 51, 3-53.

### **3) Stock Return Predictability**

- \*Campbell, Lo and MacKinlay, Chapter2.
- Lewellen, Jonathan, 2004, "Predicting Returns With Financial Ratios," *Journal of Financial Economics*, 74, 209-235.
- Stambaugh, R. F., 1999, "Predictive Regressions," *Journal of Financial Economics*, 54, 375-421.
- \*Goyal, Amit and Ivo Welch, 2008, "A Comprehensive Look at the Empirical Performance of Equity Premium Prediction," *Review of Financial Studies*, 21, 1455-1508.
- \*Campbell, John Y. and Samuel Thompson, 2008, "Predicting the Equity Premium Out of Sample: Can Anything Beat the Historical Average?" *Review of Financial Studies*, 21, 1509-1531.

### **4) Present Value Relations and Return Decomposition**

- \*Cochrane, Ch.20.1
- \*Campbell, Lo and MacKinlay, Chapter 7
- \*Vuolteenaho, Tuomo, 2002, "What Drives Firm-Level Stock Returns?" *Journal of Finance* 57:233-264
- Campbell, John Y. and Tuomo Vuolteenaho, 2004, "Bad Beta, Good Beta," *American Economic Review* 94:1249-1275.

### **5) Asset Prices and the Macroeconomy**

- \*Cochrane Ch.2 and 8
- \*Campbell, Lo and MacKinlay, Chapter 8
- Mehra, Rajnish and Edward C. Prescott, "Equity Premium Puzzle in Retrospect," Handbook of the Economics of Finance ed. by G. M. Constantinides, M. Harris and R. Stulz, North Holland, Amsterdam, 2003.
- \*Hansen, Lars Peter and Kenneth J. Singleton, 1983, "Stochastic Consumption, Risk Aversion, and the Temporal Behavior of Asset Returns," *Journal of Political Economy*, 91(2), pp.249-65.
- \*Lettau, Martin, and Sydney Ludvigson, 2001, "Resurrecting the (C)CAPM: A Cross-Sectional Test when Risk Premia are Time Varying," *Journal of Political Economy*, 109, 1238-1286.

## 2. Learning Outcomes

### 2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Presentation & Assignments
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Presentation & Assignments
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	Group Assignments
	2.2. Students will be able to apply leadership theories and related skills.	Group Assignments
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	Assignments
	3.2. Our students will practice ethics in the duration of the program.	Assignments
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Assignments
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Assignments
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Assignments
	5.3. Our students will demonstrate competency in critical thinking.	Assignments

### 2.2 Course specific objectives

1. Our students will be able to analyse various issues in stock markets.	5.1. Our students will have a good understanding of databases about stock markets.	Assignments
	5.2. Our students will have a good understanding of MATLAB software used to analyse the data.	Assignments
2. Our students will be prepared to execute research in empirical	2.1. Our students will be able to think about how to apply asset pricing models to do their own research in corporate finance or	Assignments

asset pricing.	banking.	
	2.2. Our students will be able to start to think about how to contribute to existing literature in empirical asset pricing.	Assignments

### **2.3 Assessment/Grading Details**

Type	Weighting	Date
Class Participation and Presentation	30%	TBA
Individual Assignment	40%	TBA
Group Assignment	30%	TBA
Total	100%	

### **2.4 Academic Honesty and Plagiarism**

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

## **3. Topics, Teaching and Assessment Schedule**

Lecture 1-4: CAPM and Introduction to MATLAB

Lecture 5-8: Multifactor Models

Lecture 9-12: Predictability of Stock Returns

Lecture 13-15: PV Relations and Return Decomposition

Lecture 16-18: Asset Prices and the Macroeconomy

## **4. Miscellaneous**

I expect you to have read the assigned chapters/papers for each session thoroughly before each class. I will evaluate your participation based on the quality of your contribution to class discussions. If the presenter makes a mistake, you should be familiar enough with the papers to identify and help correct the mistake. Thorough preparation and participation in every class is mandatory.