

## ***Empirical Methods in Finance: Asset Pricing*      *FINA790L***

Professor Bruno Solnik

[http://studies.hec.fr/runtime/HEC/solnik/ID-1158708925183-MYWAVWUC/\\_](http://studies.hec.fr/runtime/HEC/solnik/ID-1158708925183-MYWAVWUC/_)

This course provides an introduction to empirical methods that have played an important role in research in finance. We will go over selected topics in asset pricing and related fields. In each session we will discuss the methodological issues raised in important published papers.

The goal is not to provide an exhaustive survey or coverage of the entire literature. Instead, we will focus on understanding why a particular, but major, empirical methodology has been chosen that is best adapted to the problem at hand.

The course will be conducted in an interactive fashion. A topic will be selected for each session. A couple of papers will be assigned and participants will be expected to make a presentation outlining the empirical issues and the solutions proposed in the papers. This should train the participants to focus on the more recent research, to help their own research plans.

I have selected six topics for the six sessions. But the list could evolve as the course progresses. Only the first two sessions are detailed at this time.

### **Two textbooks provide background material:**

**Campbell, Lo and MacKinley, *The Econometrics of Financial Markets*, Princeton University Press, 1996. (CLM)**

This is a classic. It is a bit old but provides good coverage of traditional empirical finance up to 1995. The introduction is freely available on Internet at:

<http://www.pupress.princeton.edu/chapters/s5904.pdf>

**John Cochrane, *Asset Pricing*, Princeton University Press, 2005.**

This is a difficult but useful textbook. It introduces a modern theoretical coverage of asset pricing. It then uses this theoretical model to provide a “unified” approach to empirical asset pricing. Reading Chapter 1 is a must. I do not mean that you should understand every word or equation, but that you get a general feeling for the material covered

***First class: October 4***

***Efficient Market Hypothesis (EMH) and a review of Asset pricing Tests***

**Prior to class please read the introduction of CLM:**

<http://www.pupress.princeton.edu/chapters/s5904.pdf>

**Also read and be ready to discuss:**

Andrew Lo and Craig MacKinley, "Stock prices do not Follow random Walk: Evidence from a Simple Specification Test", *Review of Financial Studies*, vol 1, 41-66, 1988.

**For fun:**

Interview of Gene Fama:

[http://www.dfaus.com/library/reprints/interview\\_fama\\_tanous/](http://www.dfaus.com/library/reprints/interview_fama_tanous/)

***Second class: October 11***

***Testing CAPM I: portfolio methodology***

As an illustration of the previous class, you will be asked to perform some EMH tests.

We will review two classic articles and some others.

Fama, Eugene and James MacBeth, 1973, Risk, return and equilibrium: Empirical tests, *Journal of Political Economy* 81, 607-636

Fama, Eugene and Kenneth French, 1992, The cross-section of expected stock returns, *Journal of Finance* 47, 427-465

Berk, Jonathan, 1995, A critique of size-related anomalies, *Review of Financial Studies* 8, 275-286

***Other topics scheduled (subject to revision):***

- Testing CAPM II: GMM techniques and others
- Predictability of stock returns
- International correlation
- Behavioral finance and asset pricing