B9327-001 Empirical Asset Pricing II
Fall 2022
Course Outline and Syllabus

This draft: June 8, 2022 (subject to future revisions)

Contact Information:
Professor Stijn Van Nieuwerburgh
Kravis Hall, office 796
Email: svi2110@columbia.edu
Office Hours: Before or after class. Otherwise, please email me for an appointment.

Administrative Assistant: Christina Izzo, cti2235@gsb.columbia.edu
Teaching Assistant: Neel Shah, NShah22@gsb.columbia.edu

Schedule
The class takes place on Mondays from 2-5.15pm. The first class is on September 12. There is no class on October 17 and on November 7. The last class is on December 12. The classroom is Kravis XX.

Description
The course provides a robust discussion of recent research in empirical asset pricing. The course format will be lectures with student Q&A. The goal is to connect empirical methods to theoretical concepts, and ultimately to create ideas for independent research in asset pricing.
Prerequisites
The course is designed for PhD and MS students in finance. The suggested prerequisites are Econometrics, Financial Econometrics or Time Series Analysis, Finance Theory I. You may take the course without all these prerequisites at your own peril. At least one PhD-level finance course on asset pricing and one PhD-level course on statistics or econometrics is required. Students are also encouraged to take “Asset Pricing: Theory and Evidence” (in CBS finance) or “Macro Finance” (in the CU economics department) concurrently or before this course. This course is designed to have minimal overlap with the preceding courses.

Requirements
There are three requirements for this course. The first is that you participate in class. You are expected to read through the class material and required papers before class. The goal is to spend a fair amount of time discussing the research in interactive format. This requires investing the time to read the material and come with a list of Q&A. Attendance is not participation. Participation accounts for 20% of your grade.

The second requirement is that you complete 6 problem sets. It is hard to learn empirical asset pricing without doing empirical asset pricing. So, the problem sets are exercises to get you started. You may work in groups of up to 3 people, but everyone must hand in their individual copy. Each problem set counts for 5% of the grade, for a total of 30%. Problem sets are due before the start of class the week after the lecture to which they pertain. For example, the file “PS_EAP_week3.pdf” covers the material in week 3 and is due before the start of lecture/week 4.

The third requirement is that you write a term paper. The minimum requirement for the paper is that you survey one of the areas covered in this class in more depth, assess what the contributions of the papers are, discuss their strengths and weaknesses, and propose how they could be extended or improved. A better paper would replicate and extend one of the papers we read, which is a great way to start a research project. The best papers would explore de novo research ideas in empirical asset pricing, possibly drawing new connections between the topics we covered. The due date for the paper is Friday December 16, no exceptions. The term paper accounts for 50% of your grade.
Materials
Articles and lecture notes that we will be covering will be available on Canvas. If you want to work in this area, you will need to develop a working knowledge of Matlab and/or Python.

Excellent reference books are the following:


The reading list below cites the papers we will discuss, some in more detail than others, and a few are there for your own reference only. The key papers which I would like you to read before class are indicated with a star.
**Week 1 – September 12**

**Topic: Equity Return Predictability: The Role of Cash Flows and Discount Rates**


Lettau, Martin and Stijn Van Nieuwerburgh, 2008, Reconciling the Return Predictability Evidence, Review of Financial Studies 21, 1607-1652

Week 2 – September 19
Topic: The Cross-Section of Stock Returns and the Factor Zoo


Feng, Guanhao, Stefano Giglio, and Dacheng Xio, 2020, Taming the Factor Zoo, Journal of Finance, 75, 1327-1370.


*Harvey, Campbell, Yan Liu, and Heqin g Zhu, 2016, ... and the Cross-Section of Expected Returns, Review of Financial Studies 29, 5-68.


Lettau, Martin and Markus Pelger, 2018, Factors that fit the time series and cross-section of stock returns, Review of Financial Studies, 33, 2274-2325.
Week 3 – September 26
Topic: Intermediary-based Asset Pricing


Week 4 – October 3

**Topic: Production-based Asset Pricing Models**


Week 5 – October 10

**Topic: Asset Pricing via Demand Systems**


* Koijen, Ralph and Motohiro Yogo, 2019, A Demand System Approach to Asset Pricing, Journal of Political Economy, 127, 1475-1515


Week 7 – October 31
Topic: Volatility


Giglio, Stefano and Bryan Kelly, 2018, Excess volatility: Beyond discount rates, Quarterly Journal of Economics 133, 71-127.


Bauer, Michael and James Hamilton, 2017, Robust Bond Risk Premia, Review of Financial Studies 31, 399-448


*Ludvigson, Sydney and Serena Ng, 2009, Macro Factors in Bond Risk Premia, The Review of Financial Studies 22, 5027-5067

Week 9 – November 21
Topic: Corporate Bonds and CDS


*Greenwood, Robin and Samuel Hanson, 2013, Issuer Quality and Corporate Bond Returns, Review of Financial Studies 26, 1483-1525.


Week 11 – December 5
Topic: Commodities


Killian, Lutz, 2009, Not All Oil Price Shocks Are Alike: Disentangling Demand and Supply Shocks in the Crude Oil Market, American Economic Review 99, 1053-1069


Week 12 – December 12
Topic: Real Estate and MBS


*Giglio, Stefano, Matteo Maggiori, and Johannes Stroebel, 2015, Very Long-Run Discount Rates, Quarterly Journal of Economics 130, 1-53.

Giglio, Stefano, Matteo Maggiori, and Johannes Stroebel, 2021, Climate Change and Long-Run Discount Rates: Evidence from Real Estate, Review of Financial Studies 34, 3527-3571


Sagi, Jacob, 2021, Asset-Level Risk and Return in Real Estate Investments, Review of Financial Studies 34, 3647-3694.