
McGill University

Fall 2019

FINE-703: Empirical Research in Finance

Prof. Sergei Sarkissian

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Class Time:	MON 08:35-11:25
Class Location:	SBB 310
Office Hours:	MON 11:30-12:00 & by appointment
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Prerequisites:

PhD-level Introduction to Financial Economics
PhD-level Time Series Econometrics
Basic programming and data management skills

Course Description:

This course covers a range of empirical studies of financial markets. The primary emphasis is on the asset pricing literature. The topics in this area include time-series return predictability, cross-sectional market anomalies, tests of single- and multi-factor risk-return models, consumption-based asset pricing. Other related areas, such as fund performance evaluation, event studies, and behavioral finance will be discussed as well. The course covers several methodological aspects of empirical finance research such as the concept of stochastic discount factor (SDF), GMM-based estimation of parameters of asset pricing models, modern mean-variance efficiency bounds, and some issues in long-run abnormal return measurement and panel studies. Most of asset pricing tests will be performed in both unconditional and conditional settings.

Course Objectives:

The main objective of the class is to create a high quality discussion on each empirical finance topic that we will study. If this goal is achieved, then this course will help you:

- A. Understand and critically evaluate empirical studies in finance.
- B. Develop methodological skills that you could efficiently use in your own research.
- C. Think about a potential dissertation topic.

Course Materials:

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

Ferson, W., 2019, *Empirical Asset Pricing: Models and Methods*, MIT Press.

I have also listed relevant articles for each class topic (see Detailed Reading List). The papers marked with ☼ are mandatory for reading, while the underlined papers require a short written review. In addition, you will be required to use some statistical software package for your assignments and other potential empirical work. You can choose any application package you feel more comfortable with, but the most useful ones for this class are those that have good matrix-based computing capabilities, such as *Matlab*. You should make your software available to yourself by the end of the second week of classes.

Grading:

Assignment 1:	10%
Assignment 2:	15%
Assignment 3:	20%
Presentation:	25%
Final Exam:	30%

Assignment #1: You will analyze the time-series dynamics of asset returns.

Assignment #2: You will test the CAPM using Fama-MacBeth regression method.

Assignment #3: You will test CCAPMs using GMM and Hansen-Jagannathan bounds.

Presentation: You will have to choose a topic from the reading list and prepare a one-hour presentation. **At least one week** before your presentation, you should meet with me to go over the preliminary outline of your talk. At that time, you should be at least 50% prepared for the task. The meeting time should be set with me in advance. The student-led presentations will start from the fourth week of classes.

Final Exam: The final is a **48-hour** take-home exam. You will have to write a referee report on an empirical finance paper that I will assign individually to each student. To prepare your report, you will be able to use any books and articles available in the library and on the internet, but you may not seek help from other people. Towards the end of the semester, I will set up a date and a time range (for your flexibility) when you would be able to pick up your paper to referee. The 48-hour count will start from the time you pick your paper.

You **must** read the assigned materials for each class ahead of time. Do not expect to know every detail in the textbooks or papers (some of them are very hard to read). However, you should make a good effort to understand the new topic to the point that it would allow you to share the responsibility for class discussions with me and other students.

Course Schedule

Date	Topic	Remarks
<i>Sep. 6</i>	Introduction	
Sep. 9	Generalized Method of Moments	
Sep. 16	Hansen-Jagannathan Bounds and Distance	
Sep. 23	Time-Series Dynamics of Asset Returns: Autocorrelation, Mean-Reversion, Momentum, Volatility	
Sep. 30	Time-Series Dynamics of Asset Returns: Return Predictability with Information Variables	
Oct. 7	Tests of CAPM: Unconditional and Conditional Approaches	Assign. 1 due
<i>Oct. 11</i>	Cross-Sectional Return Anomalies	
Oct. 21	Tests of APT: Unconditional and Conditional Approaches	
Oct. 28	Tests of Consumption CAPMs: Complete Markets, Time Separable, Long-Run Risk Models	Assign. 2 due
Nov. 4	Tests of Consumption CAPMs: Habit Persistence and Incomplete Market Models	
Nov. 11	Fund Performance Evaluation: Unconditional and Conditional Approaches	
Nov. 18	Behavioral Finance: Familiarity, Overconfidence, Herding, Investor Sentiment	Assign. 3 due
Nov. 25	Review	