

FNCE 926: Empirical Methods in Corporate Finance

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This course will teach students how to perform empirical research in corporate finance, broadly defined. To do so successfully, one must understand all aspects of the research and publication process. Therefore, the course will explore several research-related aspects of faculty life, all of which will culminate in different deliverables. The emphasis will be on learning-by-doing.

- **Writing:** Your primary job will be to write publishable articles. Writing well makes this process immensely easier if referees and editors can understand what you are doing without a great deal of effort. Writing well will also improve your research because to clearly convey your message to a diverse audience, you must have a strong grasp of your subject matter.
 - *Deliverable:* You will write a first draft of a publishable paper. The draft can be somewhat incomplete, but it should be clear progress towards something publishable in a top journal.
- **Empirical methods and looking forward:** Researchers in Corporate Finance apply a variety of different empirical methods in practice (linear regression, difference-in-difference estimators, regression discontinuity, instrumental variables, etc.). I will discuss these techniques, and more recent ones such web scrapping, natural language processing, and machine learning, by teaching you Python and the relevant ecosystem (e.g., Pandas, Numpy, Beautiful Soup, etc.).

Python is a highly extensible language that is capable of handling virtually all your needs as an applied researcher. This extensibility comes at a cost of a somewhat steeper learning curve but one that I believe will be worth climbing at the start of your career.

- *Deliverable:* The first part of each lecture will consist of programming Python programming exercises that we will undertake together, the goal of which is to teach you the Python in the context of performing empirical research. ***Bring your laptop to each class!***

- **Presenting and participating:** Your ability to present your research well will play a significant role in your career. Your participation at conferences and seminars is also important. Asking “good questions” is a signal of one’s engagement and value to the profession and your department.
 - *Deliverable:* You will present a paper to the class and be expected to engage with other speakers.
- **Referee Reports:** You will learn how to write (and not to write) a referee report. Writing constructive and succinct referee reports it is important for several reasons. First, I believe in serving the profession that will serve you, and refereeing is an important aspect of your service. Second, writing helpful referee reports will cast you in a good light with editors who not only handle your papers but may also write your promotion letters. Finally, it will teach you how to think critically, a skill that will bear fruit when turned inward towards your own work.
 - *Deliverable:* You will write a referee report of a recent working paper.
- **Discussions:** You will learn how to prepare and present a constructive discussion. Good discussions are important for reasons similar to writing good referee reports with the added pressure of presenting well.
 - *Deliverable:* You will discuss a paper in front of the class.

As alluded to above, each class will allocate time to:

1. Python programming,
2. Instructor and student presentations and discussions, and
3. Research project discussion in which the class provides feedback to students on their research project.

The class schedule below provides a tentative outline of what we will be doing in each class. In addition to *bringing your laptop to every class, I expect you to come to class prepared, having done the required readings and assignment.*

Reading List:

This section contains a list of readings that will prove useful for various aspects of the course.

- Roberts, Michael and Toni Whited, 2013, “Endogeneity in Empirical Corporate Finance,” *Handbook of the Economics of Finance*, vol 2.
 - This is a useful starting point for a discussion of econometric methods applied in context. It also contains numerous references on each topic for more details.
- Vanderplas, Jake, 2016, [A Whirlwind Tour of Python](#)
 - Short introduction to programming concepts in Python (and it’s free).
- Vanderplas, Jake, 2016, [Python Data Science Handbook](#)
 - Introduction to working with data using Python and the primary data-oriented packages: Numpy, Pandas, Matplotlib, and Scikit-Learn. There is a free online version written in the form of Jupyter notebooks.
- Canvas course website
 - We have a course Canvas site that will act as a repository for many of the course materials. It is also where you can upload your assignment submissions. Please make sure to register for the course.

Recent job market papers:

- [Barrot, Jean-Noel, 2016, Trade credit and industry dynamics: Evidence from Trucking firms, *Journal of Finance*](#)
- [Bernstein, Shai, 2014, Does going public affect innovation? *Journal of Finance*](#)
- [Jeffers, Jessica, 2017, The impact of restricting labor mobility on corporate investment and entrepreneurship, *Working paper*](#)
- [Koudijs, Peter, 2015, The boats that did not sail: Asset price volatility in a natural experiment, *Journal of Finance*](#)
- [Nelson, Scott, 2018, Private information and price regulation in the US credit card market, *Working paper*](#)

Recent job market papers:

- [Bennedsen et al., 2007, Inside the family firm: The role of family succession decisions and performance, *Quarterly Journal of Economics*](#)
- [Chen et al., 2018, The decline of big-bank lending to small business: Dynamic impacts on local credit and labor markets, *Working paper*](#)
- [Chava, Sudheer and Michael Roberts, 2008, How does financing impact investment? The role of debt covenants, *Journal of Finance*](#)
- [Di Maggio, Marco and Amir Kermani, 2017, Credit-induced boom and bust, *Review of Financial*](#)

Studies

- [Dreschler et al., 2016, Who borrows from the lender of last resort? Journal of Finance](#)
- [Leary, Mark and Michael Roberts, 2005, Do firms rebalance their capital structures, Journal of Finance](#)
- [Leary, Mark and Michael Roberts, 2010, The pecking order, debt capacity, and information asymmetry, Journal of Financial Economics](#)
- [Leary, Mark and Michael Roberts, 2014, Do peer firms affect corporate financial policy?, Journal of Finance 69, 139-178.](#)
- [Lopez-Salido et al, 2017, Credit market sentiment and the business cycle, Quarterly Journal of Economics](#)
- [Malmendier, Ulrike and Stefan Nagel, 2010, Depression babies: Do macroeconomic experiences affect risk taking?, Quarterly Journal of Economics](#)
- [Matvos, Gregor and Amit Seru, 2017, The market for financial adviser misconduct, Journal of Political Economy](#)
- [Mian, Atif and Amir Sufi, 2009, The consequences of mortgage credit expansion: Evidence from the US Mortgage Default Crisis, Quarterly Journal of Economics](#)
- [Mian, Atif and Amir Sufi, 2014, What explains the 2007-2009 drop in employment? Econometrica](#)
- [Mullainathan, Sendhil and Jann Spiess, 2017, Machine learning: An applied econometric approach, Journal of Economic Perspectives](#)

Some “classics”:

- [Angrist, Josh and Victor Lavy, 1999, Using Maimonides' rule to estimate the effect of class size on scholastic achievement, Quarterly Journal of Economics](#)
- [Angrist, Josh, 1990, Lifetime earnings and the Vietnam era draft lottery: Evidence from social security administrative records, American Economic Review](#)
- [Bertrand, Marianne and Sendhil Mullainathan, 2004, Are Emily and Greg more employable than Lakisha and Jamal? A Field experiment on labor market discrimination, American Economic Review](#)

Tentative Schedule:

- 31-Aug *Course introduction*
Me Writing Presentation
Research Project
Homework:
[Download and install Anaconda Python distribution to laptop](#)
[Explore the jupyter notebook](#)
This comes with the Anaconda distribution so need for a separate install (I think?)
[Explore Stackoverflow](#)
When you have a question, type it in. Takes practice
- 7-Sep *Programming*
Me Seminar Presentation - unprepared
Research Project
Homework
Read Leary and Roberts, Peer Effects
- 14-Sep *Programming*
Me Seminar Presentation - prepared
Research Project
- 21-Sep *Programming*
Me Conference Presentation - Financial Crowding Out
Research Project
Homework
Pick 3-4 papers for groups of students to present conference style (20 minutes) next we
Read papers students will present next week.
- 28-Sep *Programming*
Student Conference Presentations
Research Project
- 5-Oct Fall Break
- 12-Oct *Programming*
Student Conference Presentations
Research Project
- 19-Oct *Programming*
Me Discussion Presentation - NBER Discussion of Rauh Financial Condition
Research Project
Homework
Pick 3-4 papers for groups of students to discuss conference style (20 minutes) next we
Read papers students will discuss next week.
- 26-Oct *Programming*
Student Discussion Presentations
Research Project
Homework
Read JF Referee Guidelines and Berk et al paper on Preparing a Referee Report
- 2-Nov *Programming*
Student Discussion Presentations
Research Project
- 9-Nov *Programming*
Me Presentation on Referee reports
Research Project
Homework
Pick 3-4 papers for groups of students to write a referee report for next week.
Read papers to assess the referee reports.
- 16-Nov *Programming*
Student referee reports
Research Project
- 23-Nov Thanksgiving
- 30-Nov *Research Project*
Presentations
- 7-Dec *Research Project*
Presentations