# Syllabus

# Finance 971: Seminar-Corporate Finance (Ph.D.) First half semester Professor Oliver Levine

Spring 2025 Updated 17 Jan 2025

#### **Basic Information**

Finance 971: Seminar-Corporate Finance (Ph.D.), 3 credits full semester

Department of Finance, Investment, and Banking

University of Wisconsin-Madison

Monday, 4:00-5:15pm, and Tuesday, 2:25-3:35pm

Duration: 21-Jan-2025 through 04-Mar-2025 (7 sessions)

Meeting room: Grainger 4349

Course website: http://canvas.wisc.edu

Instructional Modality: face-to-face

Requisites: Declared in Business or Economics PhD programs

Description: Intensive study and critical examination of recent empirical and theo-

retical literature in corporate finance.

#### Instructor

Oliver Levine
Associate Professor of Finance
oliver.levine@wisc.edu (preferred contact)
Available by appointment.

#### Teaching Assistant

Philip Coyle
PhD Candidate, Finance and Economics
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Available by appointment.

#### Course Learning Outcomes

- Use statistical software and financial databases to perform econometric analyses commonly used in academic corporate finance research.
- Understand standard reduced-form and structural approaches to addressing problems of endogeneity in answering questions of causality.
- Identify, describe, and produce questions at the frontier of research in academic corporate finance.
- Demonstrate the theoretical body of work that comprises corporate finance, including its fundamental theorems
- Examine the big open questions in theoretical research in corporate finance
- Apply the quantitative methods used in corporate finance research

# Grading

Problem sets: 40%

In-class paper presentations: 21%

Literature review: 15% Research proposal: 15%

In-class discussion/participation: 9%

# Expanded Course Description

Finance 971 is a doctoral-level course in the theory and methods used in the corporate finance literature. This course is the first half of the corporate finance sequence; the second half is taught by Professor Dean Corbae. This half of the course will focus on empirical methods commonly used in the corporate finance literature, with an emphasis on understanding and controlling for forms of endogeneity. We will begin with reduced-form and panel data empirical techniques, followed by a discussion of the basics of firm models and identification in a structural setting. We will emphasize

applications of common empirical techniques (by discussing the existing literature and working with common datasets) rather than econometric theory.

# Topics covered (tentative)

- Applied econometrics
  - Linear regression
  - Endogeneity
  - Causality
  - Instrumental variables
  - Natural experiments
  - Difference in difference estimators
  - An introduction to structural models of the firm
  - Identification in the reduced form and structural settings
- Literature subject areas
  - Cash holdings
  - Capital structure
  - Q theory of investment
  - Testing/measuring financial constraints
  - Agency conflicts
  - Corporate taxation

#### Problem sets

There will be two problem sets. These will involve doing empirical analysis using Compustat and CRSP data. Students should use Stata to perform the analysis. Submissions should include brief write-ups of the results as well as the Stata DO file(s) used in the analysis. Assignments and due dates will be posted on the course website.

#### Literature review and Research proposal

Each student will be required to come up with a proposal for research in **corporate finance**. The proposal can include a model but should have at least some empirical component. The research topic should be within the realm of corporate finance (ask me if you're not sure). There will be two components to this proposal. First, students will present and submit a literature review in their area of interest. Second, students will present and submit a proposal for a research project in this area.

For the literature review, select a specific topic that interests you. Be sure that the topic you select is narrow enough that you can summarize the literature in a relatively brief manner. For example, don't select "capital structure," "dividend policy," or "mergers and acquisitions." More reasonable would be "agency conflicts and leverage," or "tax effects of M&A." If you don't know where to begin, just start looking at the broader literature and find something that interests you. You will need to be aware of the broader literature, especially the classic papers, even though your sub-topic may be only indirectly related. To help you get started, it may be useful to refer to the course reading list. You may also find helpful the very extensive Handbook of Corporate Finance: Empirical Corporate Finance Vols 182, edited by Espen Eckbo. These lists may help as a starting point, but Google Scholar will be your close friend.

As a starting point, I encourage you to identify classic and important papers in the area and use Google scholar's "cited by" feature to map out the course of subsequent literature, following the trail to the frontier research. What are the research questions that have captivated this area of finance? Why do people care? Often the classic papers introduce important research questions that underpin research even many decades later. Alternatively (or in conjunction), it can be useful to identify a frontier paper and use their references to work backwards. Either way, it is important to be aware of both the classic and frontier research in your subject area. You may also find it useful to look at the most recent conference programs at top finance conferences, e.g. Western Finance Association, American Finance Association, NBER, and Society for Financial Studies Cavalcade, for unpublished papers at the frontier. It is important to be able to grasp the main thrust of a paper without having to read the entire paper, for example by reading the abstract and introduction and scanning the tables and figures or model. The point of the literature review is to understand the general idea of what has been done; when there are details you need to fill in as your project progresses, you will know which papers to read more carefully.

Once you have an understanding of how the research fits together over time, write a 2–4 page literature review that clearly identifies the contributions of the important papers in the literature and how they are inter-related. It is **not** necessary to describe the papers in details; concisely summarize their research question, main idea and

findings. Try to do it in one or two sentences. Sometimes it is useful to lump papers together that follow a certain theme that don't need individual descriptions. If you can, begin to identify the unanswered questions and the holes in the literature.

Students will give a 10–15 minute presentation on this literature review in class around Week 5. Structure this as to be as useful to your fellow students as possible. Your audience should come away feeling as though they know the history and potential trajectory of the subfield.

The written literature review, and presentation slides, should be submitted through Canvas. Please use LATEX with bibtex, and submit both the pdf and tex files.

The second component will be to propose a research project in your area of interest. Hopefully the literature review will uncover an interesting question that hasn't been adequately addressed by the literature. As a general practice, it may not be useful to do a literature review as a starting point for research: you will have other people's ideas in your head which may make the field appear saturated. However, I think it's important at this point in your research careers to learn what people find to be interesting and what constitutes a contribution. If you are struggling coming up with an idea, send me an email and we can chat. I am happy to meet with you to discuss one-on-one your research idea.

Once you have a research idea, write it up in 2–4 pages. Include only a very concise and limited literature review, as you have already done this in the previous exercise. Be sure to include what your research question is, why it's important, how it contributes to the existing literature, and how you plan to execute the project. Execution includes doing some exploration as to what datasets you will be using. I understand that many of the details of the project will not be fully known to you, but try to be as specific as possible in your proposal. The research you propose should be feasible and well-defined. Students will present their research proposal in a 10–15 minute presentation around Week 7.

The goal of this exercise is to have you think about novel ideas in corporate finance. Of course, it'd be great if these proposals eventually become actual research projects, but this is not expected. You do not need to perform the research you propose. I am happy to discuss with you different topics or ideas if you have trouble getting started.

# Paper presentations

Each student will give short presentations on two papers during the semester. One of these papers will be chosen by me, and will typically be related to the topics covered during lecture. The other will be selected by you (see subsection below). Be prepared to discuss the paper during and after the presentation. This is an excellent time to ask the presenter to clarify important details. All students are expected to read the papers before coming to class.

Presentations should include slides prepared by the student and last 10–12 minutes. We will open the floor to discussion as a class after the presentation. To help facilitate discussion, **come prepared with at least one question or comment for each paper**. Presentations should include a summary and an analytic discussion of the empirical approach, tests, and results.

Students should feel free to organize the presentation as they see best. However, an example of a reasonable outline/approach to presenting would be as follows:

- 1. Motivation and research question
- 2. How does this contribute/fit in to the existing literature?
- 3. Describe the approach to answering the research question
- 4. Brief summary of findings/results
- 5. What are the weaknesses/holes of the paper? Be critical. Be a referee.
- 6. What new questions do these findings raise? What is left open? (This is especially important because this can spark research ideas for the presenter and other students.)

This form is similar to how one would present their own research (parts 1–4), plus a critical discussion of the weaknesses and unanswered questions (parts 5–6). A suggested guide would be to spend roughly a quarter to half of the time discussing parts 4–6. These are arguably more difficult to do (because they're not in the paper) but also more interesting and useful.

To be clear, presenters are not expected to be an advocate for the paper: if there are aspects they don't like, be fair in defending them as well as drawing critical attention to them. This is similar to being a referee or conference discussant with the benefit that the presenter can be brutally honest (i.e. you don't have to worry about offending someone who may someday be your referee).

#### Selecting a paper to present

You will choose one corporate finance paper to present during the semester. The paper should be recent work, preferably a working paper (if not, something published in the last year or two). This will complement the paper presentation I assign to you which will typically be more established contributions.

While it is valuable to see the most frontier work, it can also be difficult to discern the impact or reception of a paper that is young. To help filter out high-quality working papers, and make the search more tractable, I strongly encourage you to select a paper that was accepted at one of the top finance conferences. In particular, use the most recent programs of the following conferences to find a paper:

- Western Finance Association meetings
- American Finance Association meeting
- Society for Financial Studies Cavalcade
- Utah Winter Finance Conference
- NBER Corporate Finance (and Summer Institute)

A high percentage (> 50%) of papers accepted to these conferences are ultimately published in top-3 finance journals (Reinartz and Urban, 2016).

More generally, it is a good idea for you to review conference programs regularly to see what others are working on. This can be particularly valuable as you enter the job market, as conference programs reflect trends and innovations in research much earlier than do journals.

# Calendar and reading list

See the course website for an up-to-date calendar and reading list.

#### ACADEMIC INTEGRITY

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to https://conduct.students.wisc.edu/academic-integrity/

# ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

McBurney Disability Resource Center syllabus statement: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty, will work either directly with the student or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA." http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php

#### DIVERSITY & INCLUSION

Institutional statement on diversity: "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background - people who as students, faculty, and staff serve Wisconsin and the world." https://diversity.wisc.edu/

#### Usage of Audio Recorded Lectures Statement

Lecture materials and recordings for FIN 971 are protected intellectual property at UW-Madison. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or have lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also

prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

### How Credit Hours are met by the Course

The credit standard for this course is met by an expectation of a total of 135 hours of student engagement with the course learning activities (at least 45 hours per credit), which include regularly scheduled instructor:student meeting times (150 minutes each week), reading, writing, problem sets, and other student work as described in the syllabus.

#### Regular and Substantive Student-Instructor Interaction

This course provides regular and substantive student-instructor interaction through direct instruction, providing information about course content, and facilitating discussion of course content. The course provides predictable and scheduled interaction during weekly in-person class meeting time.