THE OHIO STATE UNIVERSITY

BUSFIN 8260- Spring 2026
Advanced Corporate Finance Seminar
MW 1:30 PM – 3:00 PM, Fisher 800

Instructor: Yufeng Wu
wu.6251@osu.edu
Office: Fisher 812

Course description

This course seeks to achieve four equally important goals. First, it is intended to expose students to key papers in the structural corporate finance literature. Second, the course is designed to strengthen students' ability to appreciate, evaluate, and critique academic research in this field. Third, the course is aimed to familiarize the students with the classical models used to describe firm decisions. Lastly, the course is intended to introduce students to the methods used to solve and estimate these models.

Course materials

Online information for this course is being maintained at Carmen Canvas.

Required: Matlab on the laptop computer. It is for solving models. We have a campus-wide license. In case you have not used Matlab before, search "Matlab access for the Ohio State University" and follow the instructions for downloading.

Feel free to use AI-based coding tools (e.g., GitHub Copilot, Claude Code) to assist with coding and debugging. These tools are meant to improve efficiency, not to replace your own understanding. You should not rely on them to write entire programs from scratch, as doing so often leads to fundamental logical errors, especially when coding structural models**,** and it prevents you from developing core coding skills.

You can use your preferred data processing software (Stata, SAS, Python, ...) for data cleaning and processing.

Office Hours

By appointment. To set up an appointment, the most convenient way is to send me an email.

Grading

	Points	Due Date
In class participation	25%	N.A.
Problem set	50%	Feb 25

Referee report and proposal	25%	Mar 17

Warning:

Finding other people's write-ups or discussions of papers on the web is not an acceptable way to do a referee report. You may discuss the problem set with others, but you must code it up YOURSELF and write your own solution.

Class Participation

You are expected to read **from cover to cover** all papers whose titles are in **bold** before coming to class. For this course to work, everyone must complete these required readings in advance of each session. You may **not** rely on AI-based tools to generate summaries to substitute for reading the papers themselves. While such tools can sometimes be helpful for clarification after you have read a paper, they are **not** a replacement for careful, independent reading of the original material.

For the remaining papers (some of which are highly technical), you are still expected to open the paper and read selected sections to become familiar with the main ideas, motivation, and findings.

Problem Set

The problem set will require you to code up a dynamic problem. You should submit two things by the deadline marked in this syllabus:

- The first part is a hard copy of the written solution to each question in the problem set. The hard copy should be submitted to my mailbox in Fisher 702.
- The second part is the code. You should include everything in a master folder (name it "BUSFIN_8260_HW_*your name*") and email me the zipped file. The master folder should include:

  1) all the programs for the dynamic firm model

  2) a *main.m* file. Once clicked, it automatically generates all the relevant numbers in your writeup

  3) a .txt file that documents what each function is for

  4) a subfolder named "data" that stores all relevant data and files used for the data cleaning process

The grading of the problem set is based on three components: 1) the quality of the writeup; 2) whether the code runs and generates consistent results with your writeup---if your *main.m* file does NOT run or returns errors, the maximum points you can receive on the problem set is 70%; 3) whether the code is written and organized in a way that is logical and transparent---I cannot overemphasize the importance of this part. Think about what happens if you hear back from your referees after 6 months and now must go back to your previous code and revise it …

Referee Report and Proposal

Each student will be responsible for one referee report. The referee reports can be done for any paper on the syllabus for which I am not doing a detailed analysis. ALTERNATIVELY, you can find a structural estimation paper in a closely related field, you can do a report on it if you clear it with me beforehand. I will NOT approve papers that 1) contain just calibrations or 2) have no meaningful counterfactual analysis.

The **referee report** should be 3-4 pages, 1.5 linespacing, 12-point, with one-inch margins. The report should contain three parts:

- You should provide a brief summary. Copying or paraphrasing the abstract will automatically lower your grade.
- You then should provide a short list of the paper's strong points, with a brief explanation. Namely, why is this paper making a contribution to the literature *at the time when it was published?* In a typical referee report to an academic journal, this part is usually not more than two paragraphs. However, in this case, because we are focused on a selected set of impactful papers, I would make this part slightly longer to allow a thorough evaluation of their contribution to the literature.
- You should identify mistakes or insufficiencies in the paper---every paper has its own limitations. Don't hesitate to critique papers written by big names, or my own works. Grades on this part will be based on the importance of the errors you find in the paper. If you can correctly argue that an error changes the basic economic conclusions of the paper, then you will receive a good grade. If you only go after nit-picky details, then you will receive a bad grade. You should also provide a brief evaluation of whether the issues are "rescuable" within the paper's current framework, and if so, provide some suggestions.

After finishing the referee report, you should write a **proposal**, utilizing a similar framework of the paper that you have refereed. The proposal should be related to the last part of the referee report---you have identified some important issues or considerations that the paper does not address (satisfactorily), and hence, it is your turn to make an improvement! The proposal should be on a

similar or related topic to the original paper. The model does not need to follow the original paper strictly. It can be extended/modified to incorporate what you consider to be missing/important.

The proposal should be *less than* 10 pages (and it is perfectly ok for the proposal to be much shorter), 1.5 line spacing, 12-point, with one-inch margins. It would start with a clear economic question. Then, you should summarize what we already know from the literature (partly based on the paper you referred), and why that is not fully satisfactory. Then, you should describe your framework. You need to specify the key ingredients in the model, making sure that the model is internally consistent and likely solvable (numerically). You DON'T actually need to code up the model. You should also describe the data you need to empirically estimate the model, making sure that such data exists and is accessible. You DON'T actually need to get the data and run the estimation. Lastly, you should make reasonable speculations of the model solution and estimation results, demonstrating how your results could substantially contribute to our understanding of the subject matter.

Disclaimer:

I will NOT be focusing on calibrated macro models. However, I have a couple of them in the reading list because they propose elegant and quantitative frameworks that have made substantial impacts on subsequent studies that treat estimation more seriously.

I will NOT be focusing on "statistical" models---those without agents making optimal decisions. These models can have valuable applications in Labor/IO/Household. However, one limitation is that some parameter estimates do NOT carry a "structural interpretation." As a result, we cannot do much with counterfactuals. Otherwise, we will run into the famous Lucas critique, like in any regression-based analysis.

I will NOT spend a full section on estimating consumer demand. The demand models have been very well received recently in the banking/financial intermediation literature. The way to model demand is quite established, which you should have already learned in your IO class. However, I will go over examples of how we can merge demand estimation with dynamic models of banks.

Tentative Class Schedule:

Week 1 (Jan 12, 14)

Introduction

Financial constraints and firm investment

- Fazzari, Steven M., R. Glenn Hubbard, and Bruce C. Petersen (1988). Financing constraints and corporate investment, *Brookings Papers on Economic Activity* 1: 141–206

- Whited, Toni M. (1992). Debt, liquidity constraints, and corporate investment: Evidence from panel data, *Journal of Finance* 47: 1425–1460
- **Hennessy, Christopher A., and Toni M. Whited (2005), Debt dynamics, *Journal of Finance* 60: 1129–1165**
- **DeAngelo, Harry, Linda DeAngelo, and Toni M. Whited (2011), Capital structure dynamics and transitory debt, *Journal of Financial Economics* 99: 235–261.**

Week 2 (Jan 21)

Dynamic investment models with leverage choices (and other frictions)

- Russell W. Cooper, John C. Haltiwanger (2006), On the Nature of Capital Adjustment Costs, *The Review of Economic Studies*, Volume 73 (3): 611–633.
- Hennessy, Christopher A., and Toni M. Whited (2007), How costly is external financing? Evidence from a structural estimation, *Journal of Finance* 62: 1705–1745.
- Juliane Begenau, Juliana Salomao, Firm Financing over the Business Cycle (2019), *Review of Financial Studies,* 32 (4):1235–1274.
- Nikolov, Boris, and Toni M. Whited (2014). Agency conflicts and cash: Estimates from a dynamic model, *Journal of Finance* 69: 883–1921.
- Terry, Stephen J (2023). "The macro impact of short-termism." *Econometrica* 91: 1881-1912.
- Jermann, Urban, and Vincenzo Quadrini. (2012), "Macroeconomic Effects of Financial Shocks." *American Economic Review* 102 (1): 238–71.
- Morellec, Erwan, Boris Nikolov, and Norman Schürhoff (2012), Corporate governance and capital structure dynamics, *Journal of Finance* 67: 803–848.
- Rampini, Adriano A., and S. Viswanathan (2010) "Collateral, risk management, and the distribution of debt capacity." The Journal of Finance, 65 (6): 2293-2322.
- Li, Shaojin, Toni M. Whited, and Yufeng Wu (2016), Collateral, taxes, and leverage, *Review of Financial Studies* 29: 1453–1500.

Week 3 (Jan 26, 28)

Solving dynamic investment models

- Strebulaev, Ilya A., and Toni M. Whited (2012), Dynamic models and structural estimation in corporate finance, *Foundations and Trends in Finance* (6): 1–163 (All of Section 4).

Week 4 (Feb 2, 4)

GMM and SMD estimators

- **Gourieroux, Christian S., Alain Monfort, and Eric Renault, 1993, Indirect inference, *Journal of Applied Econometrics* 8, 85–118.**

Week 5 (Feb 9, 11)

Industry equilibrium models with entry, exit, and acquisitions

- **Hopenhayn, Hugo (1992). "Entry, Exit, and Firm Dynamics in Long Run Equilibrium." *Econometrica* 60 (5): 1127–50.**
- Hopenhayn, Hugo, and Richard Rogerson (1993). "Job Turnover and Policy Evaluation: A General Equilibrium Analysis." Journal of Political Economy 101(5): 915–38.
- Dimopoulos, Theodosios, and Stefano Sacchetto (2017). "Merger activity in industry equilibrium." *Journal of Financial Economics,* 126 (1): 200-226.
- Wang, Wenyu, and Yufeng Wu (2020). "Managerial control benefits and takeover market efficiency." *Journal of Financial Economics* 136, (3): 857-878.
- Levine, Oliver (2017). "Acquiring growth." *Journal of Financial Economics* 126, (2): 300-319.
- Albuquerque, Rui, and Enrique Schroth. (2010) "Quantifying private benefits of control from a structural model of block trades." *Journal of Financial Economics* 96 (1): 33-55.
- Albuquerque, Rui, and Enrique Schroth (2015) "The value of control and the costs of illiquidity." *Journal of Finance* 70 (4): 1405-1455.
- Ewens, M., Gorbenko, A., & Korteweg, A. (2022). Venture capital contracts. Journal of Financial Economics, 143(1), 131-158.

Week 6 (Feb 16, 18)

More on Dynamic Investment and Equilibrium Models and Other Applications

- **Kaboski, J. P., & Townsend, R. M. (2011). A structural evaluation of a large‐scale quasi‐experimental microfinance initiative. Econometrica, 79(5), 1357-1406.**

- **Midrigan, V., & Xu, D. Y. (2014). Finance and misallocation: Evidence from plant-level data. American economic review, 104(2), 422-458.**
- Choi, J., Tian, X., Wu, Y., & Kargar, M. (2025). Investor demand, firm investment, and capital misallocation. Journal of Financial Economics, 168, 104039.
- Taylor, Lucian. A. (2010). Why are CEOs rarely fired? Evidence from structural estimation. *Journal of Finance*, *65* (6): 2051-2087.
- Pan, Yihui, Tracy Yue Wang, and Michael S. Weisbach (2015). "Learning about CEO ability and stock return volatility." *Review of Financial Studies* 28 (6): 1623-1666.
- Jovanovic, Boyan (1979), "Job matching and the theory of turnover." *Journal of Political Economy*, 87 (5): 972-990.

Week 7 (Feb 23, 25)

Banking models and other applications

- Van den Heuvel, S. J. (2002). The bank capital channel of monetary policy. *Working Paper, The Wharton School, University of Pennsylvania.*
- Corbae, Dean, and Pablo D'Erasmo. (2021) "Capital buffers in a quantitative model of banking industry dynamics." *Econometrica* 89 (6): 2975-3023.
- Dempsey, K., & Faria-e-Castro, M. (2025). A quantitative analysis of bank lending relationships. Journal of Financial Economics, 170, 104083.
- Egan, Mark, Ali Hortaçsu, and Gregor Matvos (2017). "Deposit competition and financial fragility: Evidence from the us banking sector." *American Economic Review* 107 (1): 169-216.
- **Wang, Yifei, Toni M. Whited, Yufeng Wu, and Kairong Xiao (2022). "Bank market power and monetary policy transmission: Evidence from a structural estimation." *Journal of Finance* 77 (4): 2093-2141.**