

SYLLABUS

Financial Econometrics II, BUSN 6360-26690, Spring 2020

General Information

Time and Location: M 1:30-4:20PM, CoBA Lab #2

Instructor: Dr. Xiaojin (Aaron) Sun

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Office: BUSN-237

Office Hours: By appointment

Course Overview

This two-semester sequence of PhD Financial Econometrics is an in-depth study of quantitative methods as employed in finance and accounting research.

I have given a review on linear models, maximum likelihood, and generalized method of moments, and covered static linear panel data models and simple discrete choice models in the Fall. This semester I will talk about dynamic panel data models, treatment evaluation, and Tobit and selection models.

Course Objectives

This course aims to equip students with the econometric tools needed to analyze finance and accounting data. Students are expected to acquire theoretical knowledge on key econometric methods and practical ability to apply that knowledge in their own research.

Textbook

- *Econometric Analysis of Panel Data* by Badi H. Baltagi, 5th Edition. Wiley. ISBN: 978-1-118-67232-7.
- **(Optional)** *Microeconometrics: Methods and Applications* by A. Colin Cameron and Pravin K. Trivedi, Cambridge University Press. ISBN: 9780521848053.
- **(Optional)** *Microeconometrics Using Stata* by A. Colin Cameron and Pravin K. Trivedi, Revised Edition. Stata Press. ISBN: 978-1-59718-073-3.

Statistical Software

- Stata (available via UTEP MyAPPS)

Grading Policy

The class grade will be determined by the following components:

- **Homework Assignments (10%×5):** Five homework assignments will be given during the semester. Assignments will usually be collected on Sundays by 5PM unless otherwise announced. No late submissions will be accepted. Your homework should be typed in LaTeX or Microsoft Word.
- **Term Project and Presentation (50%):** You will have to find a topic in your area and use the knowledge acquired in this class to write a paper of your own. The project should consist of
 1. complete Stata code that produces all your results,
 2. nicely formatted figures and tables produced by your code,
 3. and a complete research paper.

The last day of the semester (May 4th) will be reserved for presentations. Each student will have about 40 minutes.

Grading Scale: 90+=A, 80-89=B, 70-79=C, 60-69=D, 59 and below=F.

Tentative Course Schedule

Dynamic Panel Data Models	Baltagi Ch 8
Unbalanced Panel Data Models	Baltagi Ch 9
Treatment Evaluation	Lecture notes
Tobit and Selection Models	Lecture Notes
Models of Count Data	Lecture Notes

Reading List

Dynamic panel

- Arellano, Manuel, and Stephen Bond. "Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations." *The Review of Economic Studies* 58, no. 2 (1991): 277-297.
- Blundell, Richard, and Stephen Bond. "Initial conditions and moment restrictions in dynamic panel data models." *Journal of Econometrics* 87, no. 1 (1998): 115-143.

- Bruno, Giovanni SF. "Approximating the bias of the LSDV estimator for dynamic unbalanced panel data models." *Economics Letters* 87, no. 3 (2005): 361-366.
- Bruno, Giovanni SF. "Estimation and inference in dynamic unbalanced panel-data models with a small number of individuals." *The Stata Journal* 5, no. 4 (2005): 473-500.
- Bun, Maurice JG, and Jan F. Kiviet. "On the diminishing returns of higher-order terms in asymptotic expansions of bias." *Economics Letters* 79, no. 2 (2003): 145-152.
- Bun, Maurice JG, and Jan F. Kiviet. "The effects of dynamic feedbacks on LS and MM estimator accuracy in panel data models." *Journal of Econometrics* 132, no. 2 (2006): 409-444.
- Dang, Viet Anh, Minjoo Kim, and Yongcheol Shin. "In search of robust methods for dynamic panel data models in empirical corporate finance." *Journal of Banking & Finance* 53 (2015): 84-98.
- Everaert, Gerdie, and Lorenzo Pozzi. "Bootstrap-based bias correction for dynamic panels." *Journal of Economic Dynamics and Control* 31, no. 4 (2007): 1160-1184.
- Flannery, Mark J., and Kristine Watson Hankins. "Estimating dynamic panel models in corporate finance." *Journal of Corporate Finance* 19 (2013): 1-19.
- Gourieroux, Christian, Peter CB Phillips, and Jun Yu. "Indirect inference for dynamic panel models." *Journal of Econometrics* 157, no. 1 (2010): 68-77.
- Kiviet, Jan F. "On bias, inconsistency, and efficiency of various estimators in dynamic panel data models." *Journal of Econometrics* 68, no. 1 (1995): 53-78.
- Roodman, David. "How to do xtabond2: An introduction to difference and system GMM in Stata." *The Stata Journal* 9, no. 1 (2009): 86-136.
- Wintoki, M. Babajide, James S. Linck, and Jeffrey M. Netter. "Endogeneity and the dynamics of internal corporate governance." *Journal of Financial Economics* 105, no. 3 (2012): 581-606.

Treatment evaluation

- Abadie, Alberto, and Javier Gardeazabal. "The economic costs of conflict: A case study of the Basque Country." *American Economic Review* 93, no. 1 (2003): 113-132.

- Abadie, Alberto, Alexis Diamond, and Jens Hainmueller. "Synthetic control methods for comparative case studies: Estimating the effect of California's tobacco control program." *Journal of the American statistical Association* 105, no. 490 (2010): 493-505.
- Abadie, Alberto, Alexis Diamond, and Jens Hainmueller. "Comparative politics and the synthetic control method." *American Journal of Political Science* 59, no. 2 (2015): 495-510.
- Card, David, and Alan B. Krueger. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *The American Economic Review* 84, no. 4 (1994): 772-793.
- Card, David, and Alan B. Krueger. "Minimum wages and employment: a case study of the fast-food industry in New Jersey and Pennsylvania: reply." *American Economic Review* 90, no. 5 (2000): 1397-1420.
- Jalan, Jyotsna, and Martin Ravallion. "Does piped water reduce diarrhea for children in rural India?." *Journal of Econometrics* 112, no. 1 (2003): 153-173.
- Huang, Jiekun, and Darren J. Kisgen. "Gender and corporate finance: Are male executives overconfident relative to female executives?." *Journal of Financial Economics* 108, no. 3 (2013): 822-839.
- Calonico, Sebastian, Matias D. Cattaneo, and Rocio Titiunik. "Robust data-driven inference in the regression-discontinuity design." *The Stata Journal* 14, no. 4 (2014): 909-946.