SYLLABUS

Financial Econometrics I, BUSN 6350-17520, Fall 2018

General Information

Time and Location: T 10:00AM - 12:50PM, BUSN-311

Instructor: Dr. Xiaojin (Aaron) Sun
Office: BUSN-222
Email: xsun3@utep.edu
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. Both corporate finance and macro-finance topics will be covered, with emphasis on the former.

In the Fall semester, I will start with a quick review on linear models, maximum likelihood, and generalized method of moments, as well as relevant hypothesis and specification tests. Then I will move on to basic panel data models, particularly fixed versus random effects models. In the Spring semester, I will cover dynamic panel data models and limited dependent variable models (discrete choice models, Tobit and selection models). Towards the end, I will discuss times series models and a few asset-pricing models if time permits.

Textbook

- *Econometric Analysis of Panel Data* by Badi H. Baltagi, 5th Edition. Wiley. ISBN: 978-1-118-67232-7.
- **(Optional)** *Introductory Econometrics: A Modern Approach* by Jeffrey M. Wooldridge, 6th Edition. Cengage Learning. ISBN: 978-1-305-27010-7.
- **(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 Mondays 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 use the knowledge acquired in this class to replicate the empirical analysis in a paper published in one of the top journals. The replication should consist of
  1. complete Stata code that produces all your results,
  2. nicely formatted figures and tables produced by your code, which correspond to those in the orginial paper,
  3. and a verbal discussion of these figures and tables.

  The last day of the semester (December 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

Core Methods: A Quick Review	
(Please read Wooldridge Chs 1-12 and Appendices A-E)	
Linear Models	Lecture Notes
Maximum Likelihood Estimation	Lecture Notes
Generalized Method of Moments	Lecture Notes
Hypothesis and Specification Tests	Lecture Notes
Panel Data Models	
Simple Panel Data Methods	Baltagi (Ch 4.1) & Wooldridge (Ch 13)
Advanced Panel Data Methods	Baltagi (Chs 2&3) & Wooldridge (Ch 14)
Hypothesis Testing with Panel Data	Baltagi (Ch 4)
Serial Correlation and Heteroskedasticity	Baltagi (Ch 5)