University of Neuchatel – Institute of Financial Analysis

Empirical Methods for Corporate Finance and Accounting Research

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Course Objectives

The objective of the course is to introduce you to empirical research in finance and accounting, with a focus on empirical corporate finance. Corporate finance is largely a non-experimental field with lots of data. The nature, scope, and detail of available data continue to expand rapidly. These data are used to test theories and to generate empirical facts that constitute a basis for further theories. In this class, you will discover and work with some of the main datasets used in empirical research and apply some of the main methods used to analyze them.

The overall approach in this class is to read and understand (selected) prior empirical work and replicate or extend some of these studies. The topics have been selected to make you work with specific datasets and methods. The primary expertise necessary is the understanding of how to use or manipulate STATA or SAS. You will need to appreciate the methods, approaches, and intuition of econometrics including and beyond a first graduate level of econometrics. I will cover some of the underlying approaches in class but our objectives will be different from those of an econometric course. Rather than a formal derivation of the underlying assumptions and tests, we will assess why something works the way it does.

Deliverables - Empirical exercises

You will have two exercise sets to do using Stata (or SAS). They are designed to get you up and running with financial datasets and methods. There is a lot of work going into extracting databases and matching datasets. You should treat this as a permanent lifelong investment and the costs will seem more bearable. You will have to extract data from the relevant source, run the assigned tests, and answer to question I will specify. Individual effort is necessary. Further information will follow, after registration. The course is equivalent to 3ECTS, and students need to succeed in all two exercises to get the credits.

Schedule-Program

We will meet on May 3, May 4 and May 5 for five hours each day (3 hours in the morning and 2 hours in the afternoon). The room is TBD. Here is the program (subject to very small adjustments):

Schedule		**Topics and deliverables**
Wednesday, May 3	Morning	Introduction and identification/causality
	Afternoon	Panel data estimations + Estimation of standard errors
		The Research Process
Thursday, May 4	Morning	Instrumental Variables
	Afternoon	Difference-in-Differences
		Exercise 1 due (panel data)
Friday, May 5	Morning	Matching Methods
	Afternoon	Regression Discontinuity Design
		Exercise 2 due (diff-in-diff)

Textbooks

- Selected chapters from the Handbook of Corporate Finance: Empirical Corporate Finance. Edited by B. Espen Eckbo: North Holland, 2007. (**HCF** hereafter)

- Cameron, A. Colin, and Pravin Trivedi, 2009, Microeconometrics: Methods and Applications, ISBN-13 #: 978-0-521-84805-3. Published by Cambridge University Press. (**CT#1** hereafter)

- Cameron, A. Colin, and Pravin Trivedi, 2009, Microeconometrics Using STATA, ISBN-13 #: 978-1-59718-048-1. Published by STATA Press. (**CT#2** hereafter)

- Wooldridge, Jeffrey M., 2002, Econometrics Analysis of Cross-Section and Panel Data, MIT Press, MA. (This has a more formal treatment of the materials).

- Angrist, D. Joshua, and Jorn-Steffen Pischke, 2009, Mostly Harmless Econometrics: An Empiricist's companion. ISBN-978-0-691*12035-5. Princeton University Press. (**AP** hereafter)

Course outline and Readings

All chapters and articles marked with an * should be **carefully** read in advance (I might add other papers later depending on interest and speed).

Identification and Causality

- ***AP**, chapter 2
- *Roberts and Whited (2012), section 2
- *Bowen, Fresard, and Taillard (2015)
- Morck and Yeung (2011)
- Leamer (2010)

Panel Data: Fixed effects and Standard Errors Estimation

- ***CT#1**, chapters 21 and 22
- ***CT#2**, chapter 8
- *Petersen (2009)
- *Lemmon, Roberts, and Zender (2008)
- **HCF**, chapters 4 and 12
- Coles and Li (2012)
- Bertrand and Schoar (2003)
- Gormley and Matsa (2014)

Instrumental Variables

- **CT#1**, chapter 4
- **CT#2**, chapters 6 and 9.2
- ***AP**, chapter 4
- *Roberts and Whited (2012), section 3
- *Chaney, Sraer, and Thesmar (2012)
- *Paravisini, Rappoport, Schnabl, and Wolfenzon (2014)
- Angrist and Krueger (2001)
- Bennedsen, Nielsen, Perez-Gonzalez, and Wolfenzon (2007)

Difference-in-Differences

- ***AP**, chapter 5, Section 2
- *Roberts and Whited (2012), section 4
- *Giroud (2013)
- Bertrand, Duflo, and Mulainathan (2004)
- Leary (2009)

Matching Methods (Wednesday)

- **ECF**, chapter 2
- *Roberts and Whited (2012), section 6
- *Almeida, Campello, Laranjeira, and Weisbenner (2012)
- Fresard and Valta (2014)

Regression Discontinuity Design

- *Roberts and Whited (2012), section 5
- *Malenko and Shen (2015)
- Chava and Roberts (2008)

Bibliography

1. Almeida, Heitor, Murillo Campello, Bruno Laranjeira, and Scott Weisbenner, 2012, Corporate Debt Maturity and the Real Effects of the 2007 Credit Crisis, Critical Finance Review 1, 3-58.

2. Angrist, Joshua, and Alan Krueger, 2001, Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments, Journal of Economic Perspectives 15, 69-85.

3. Bennedsen, Morten, Kapser Meisner Nielsen, Francisco Perez-Gonzalez, and Daniel Wolfenzon, 2007, inside the Family Firm: The Role of Families in Succession Decisions and Performance, Quarterly Journal of Economics 122, 647-691.

4. Bertrand, Marianne, Esther Duflo, and Sendhil Mullainathan, 2004, How Much Should we Trust Difference in Difference Estimators? Quarterly Journal of Economics 119, 249-275.

5. Bertrand, Marianne, and Antoinette Schoar, 2003, Managing with Style: The Effect of Managers of Firm Policies, Quarterly Journal of Economics 118, 1169-1208.

6. Bowen, Donald, Laurent Fresard, and Jerome Taillard, 2015, What's your Identification Strategy?, Management Science (forthcoming)

7. Chaney, Thomas, David Sraer, and David Thesmar, 2012, The Collateral Channel: How Real Estate Shocks Affect Corporate Investment, American Economic Review 102, 2381-2409.

8. Coles, Jeffrey , and Zhichuan Li, 2012, An empirical Assessment of Empirical Corporate Finance, Working Paper, Arizona State University.

9. Fresard, Laurent, and Philip Valta, 2014, How Do Incumbent Firms React to increased Entry Threats? Working Paper University of Maryland.

10. Giroud, Xavier, 2013, Proximity and Investment: Evidence from Plant-Level Data, Quarterly Journal of Economics, 861-915.

11. Gormley, Todd, and David Matsa, 2014, Common Errors: How to (and Not to) Control for Unobserved Heterogeneity, Review of Financial Studies 27, 617-661.

12. Khotari, S.P., and Jerold Warner, 1997, Measuring Long-horizon Security Price Performance, Journal of Financial Economics 43, 301-339.

13. Leamer, Edward, 2010, Tantalus on the Road of Asymptopia, Journal of Economic Perspectives 24, 31-46

14. Leary, Mark, 2009, Bank Loan Supply, Lender Choice, and Corporate Capital Structure, Journal of Finance 64, 1143-1185.

15. Lee David, and Thomas Lemieux, 2010, Regression Discontinuity Design in Economics, Journal of Economic Literature 48, 281-355.

16. Lemmon, Michael, Michael Roberts, and Jaime Zender, 2008, Back to the Beginning: Persistence and the Cross-Section of Corporate capital Structure, Journal of Finance 63, 1575-1608.

17. Malenko, Nadya, and Yao Shen, 2015, The Role of Proxy Advisory Firms: Evidence from a Regression-Discontinuity Design, Working Paper, Boston College.

18. Morck, Randall, and Bernard Yeung, 2011, Economics, History, and Causation, NBER Working Paper 16678.

19. Roberts, Michael, and Toni, Whited, 2012, Endogeneity in Corporate Finance, forthcoming in George Constantinides, Milton Harris, and Rene Stulz, eds. *Handbook of the Economics of Finance* Volume 2, Elsevier.

20. Paravisini, Daniel, Veronica Rappoport, Philip Schnabl, and Daniel Wolfenzon, 2014, Dissecting the Effect of Credit Supply on Trade: Evidence from Matched Credit-Export Data, Review of Economic Studies (forthcoming)

21. Petersen, Mitchell, 2008, Estimating Standard Errors in Finance Panel Datasets: Comparing Approaches, Review of Financial Studies 22, 435-480.