

Swiss Doctoral Program Network in Accounting Research (DAR)

May 12-16, 2014

University of Neuchatel – Institute of Financial Analysis

Methodology in Empirical Accounting and Finance

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Course Objectives

The objective of the course is to introduce you to empirical research in accounting and finance, with a focus on empirical corporate finance. Accounting and Finance are largely non-experimental fields 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 methods to analyze them.

The overall approach 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. 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 (6 ECTS)

To obtain 6 ECTS, you will have four exercise sets to do using Stata (or SAS). They are designed to get you up and running with financial data. 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. This first assignment (simple event study) is due **before** the beginning of the class.

Schedule-Program

We will meet five times (mornings) for three hours between May 12 and May 16. The room is TBD. Here is the program (subject to very small adjustments):

Schedule	Topics
Monday, May 12	Introduction and Event Studies <u>Exercise</u> : Compustat and CRSP warm-up
Tuesday, May 13	Identification and Causality, Panel Data and Standard Errors Estimation <u>Exercise</u> : Lemmon, Roberts, and Zender (2008)
Wednesday, May 14	Instrumental Variables <u>Exercise</u> : (Simple) Simulation
Thursday, May 15	Difference-in-Differences <u>Exercise</u> : Application of DID
Friday, May 16	Textual Analysis for Empirical Research

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 the below articles should be read (I might add other papers later depending on interest and speed).

Event studies

- **HCF**, chapter 1
- Fama, Fisher, Jensen, and Roll (1969)
- Kolar and Pynnonen (2010)
- Khotari and Warner (1997)
- Thomson (1995)

Identification and Causality

- **AP**, chapter 2
- Roberts and Whited (2012), section 2
- Bowen, Fresard, and Taillard (2014)
- Morck and Yeung (2011)
- Leamer (2010)

Panel Data: Fixed effects and Standard Errors Estimation

- **HCF**, chapters 4 and 12
- **CT#1**, chapters 21 and 22
- **CT#2**, chapter 8
- Lemmon, Roberts, and Zender (2008)

- Coles and Li (2012)
- Chen (2010)
- Petersen (2009)
- 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
- Angrist and Krueger (2001)
- Bannedsen, Nielsen, Perez-Gonzalez, and Wolfenzon (2007)
- Chaney, Sraer, and Thesmar (2013)
- Larcker and Rusticus (2010)

Difference-in-Differences

- **AP**, chapter 5, Section 2
- Bertrand, Duflo, and Mulainathan (2004)
- Giroud (2013)
- Armstrong, Balakrishna, and Cohen (2012)
- Roberts and Whited (2012), section 4
- Fresard and Valta (2014)

Textual Analysis in Accounting and Finance

- Fresard, Hoberg, and Phillips (2014)
- Hoberg and Phillips (2010)
- Hoberg and Lewis (2014)
- Tetlock, Saar-Tsechansky, and Macskassy (2008)

Bibliography

1. 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.

2. Armstrong, Christopher, Karthik Balakrishna, and Daniel Cohen, 2012, Corporate Governance and the Information Environment: Evidence from State Anti-Takeover Laws, *Journal of Accounting and Economics* 53, 185-204.
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, 2014, What's your Identification Strategy?, Working Paper University of Maryland.
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. Chen, Yangyang, 2010, Capital Structure Convergence: Is it Real or Mechanical? Working Paper.
9. Coles, Jeffrey, and Zhichuan Li, 2012, An empirical Assessment of Empirical Corporate Finance, Working Paper, Arizona State University.
10. Fama, Eugene, Lawrence Fisher, Michael Jensen, and Richard Roll, 1969, The Adjustment of Stock Prices to New Information, *International Economic Review* 10, 1-21.
11. Fresard, Laurent, 2010, Financial Strength and Product Market Behavior: The Real Effects of Corporate Cash Holdings, *Journal of Finance* 65, 1097-1122.
12. Fresard, Laurent, Gerard Hoberg, and Gordon Phillips, 2014, The Incentives for Vertical Acquisitions and Integration, Working Paper University of Maryland.
13. Fresard, Laurent, and Philip Valta, 2014, How Do Incumbent Firms React to increased Entry Threats? Working Paper University of Maryland.
14. Giroud, Xavier, 2013, Proximity and Investment: Evidence from Plant-Level Data, *Quarterly Journal of Economics*, 861-915.

15. Gormley, Todd, and David Matsa, 2014, Common Errors: How to (and Not to) Control for Unobserved Heterogeneity, *Review of Financial Studies* 27, 617-661
16. Hoberg, Gerard, and Gordon Phillips, 2010, Product Market Synergies and Competition in Mergers and Acquisitions: A Text-Based Analysis, *Review of Financial Studies* 23, 3773-3811.
17. Hoberg, Gerard, and Craig Lewis, 2013, Do Fraudulent Firms Engage in Disclosure Herding? Working Paper University of Maryland.
18. Kolari, James, and Seppo Pynnonen, 2010, Event Study testing with Cross-sectional Correlation of Abnormal Returns, *Review of Financial Studies* 23, 3996-4025.
19. Khotari, S.P., and Jerold Warner, 1997, Measuring Long-horizon Security Price Performance, *Journal of Financial Economics* 43, 301-339.
20. Larcker, David, and Tjomme Rusticus, 2010, On the Use of Instrumental Variables in Accounting Research, *Journal of Accounting and Economics* 49, 186-205.
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22. 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.
23. Morck, Randall, and Bernard Yeung, 2011, Economics, History, and Causation, NBER Working Paper 16678.
24. 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.
25. Petersen, Mitchell, 2008, Estimating Standard Errors in Finance Panel Datasets: Comparing Approaches, *Review of Financial Studies* 22, 435-480.
26. Tetlock, Paul, Maytal Saar-Tsechansky, and Sofus Macskassy, 2008, More Than Words: Quantifying Language to Measure Firms' Fundamentals, *Journal of Finance* 63, 1437-1467.
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