Bocconi University
Finance 3
Spring 2016

Instructor: Ilona Babenko
Department of Finance
Email: ibabenko@asu.edu

Class Dates: Feb 8- Mar 18
Final Exam: Apr 1
Office hours: By appointment

Course Overview: The course provides a graduate level introduction into the field of empirical corporate finance. The aim is to expose you to important recent papers and developments in the field, summarize the main issues and challenges of research in this field, and outline some standard methods used to overcome these issues. My objective is to motivate you to think about what constitutes a good empirical paper, generate and evaluate your ideas, and make progress on your own research. We will also consider a few theoretical papers and will discuss how to bridge a gap between theoretical and empirical research.

Textbooks: There are no required textbooks for this class. However, as background reading you can find helpful:

- The theory of corporate finance, by Jean Tirole (Tirole's aim is to simplify models; hence the text is more comprehensive than the original theory papers. The disadvantage though that if you read this book only, you are not exposed to many different theoretical frameworks).
- Li, Kai and Nagpurnanand R. Prabhala, 2007, Self-selection models in corporate finance (a must read for empiricist in corporate finance), Chapter 2.
- Angrist and Pischke, Mostly harmless econometrics: An empiricist's companion.

Methodological papers:

- Whited, Toni and Roberts, Michael (2012), Endogeneity in empirical corporate finance (Excellent source for an empiricist interested in corporate finance)
- Imbens, Guido and Thomas Lemieux, 2008, Regression discontinuity designs: A guide to practice, NBER working paper
- Lee, David S. and Thomas Lemieux, 2009, Regression discontinuity designs in economics, NBER working paper
- Gormeley, Todd A., and David A. Matsa, 2014, Common errors: How to (and not to) control for unobserved heterogeneity, *Review of Financial Studies* 27.
- McCrary, Justin, 2008, Manipulation of the running variable in the regression discontinuity design: A density test
- Peterson, Mitchell, 2009, Estimating standard errors in finance panel data sets: Comparing approaches, *Review of Financial Studies* 22, 435-480.
- Berk, Jonathan B., Campbell R. Harvey, and David Hirshleifer, Preparing a Referee Report: Guidelines and Perspectives

Grading Policy: Your grade will be calculated as follows:

Problem sets: 10%
Paper critiques (2): 15%

Research idea assignment (1): 10%
Research proposal and presentation (1) 20%:
Class participation and paper presentations: 20%
Final exam: 25%

Assignments:

There will be one or two *problems sets* that students need to work out individually. Students will also need to complete two *paper critique reviews*. The critique has to summarize the main contribution of the paper and place it in the literature, explain the major necessary assumptions made by the paper and discuss their validity, offer possible extensions or modifications to the model, assess whether the model captures the key elements of the real world and the main tradeoffs and whether it is tractable, and assess the strength and importance of the empirical work (if any is done in the paper). Please try to present your original thoughts rather than trying to look up on the web how a particular paper has been criticized by someone else. The critique will be presented in class, aim for 15 minutes.

Students will also have to submit *one original research idea* that have not been implemented elsewhere in the literature. The idea should be pertinent to research in empirical corporate finance. The idea should briefly summarize what the student plans to do and explain the economic importance of studying this question (1-2 pages). Why do you think it is interesting? Why do you think this question is understudied? What new will financial economists learn if your research is implemented? Please do not be discouraged if you think your research ideas are not good enough, it is not easy to produce good ideas.

A *research proposal* along with the presentation is due in the last class. The proposal has to contain original research by a student. It should be accompanied by an abstract of less than 100 words, and contain literature review section, motivation of the research question, the proposed methodology, and what kind of data you plan to use or at least would like to use. The use of actual data and some empirical analysis is highly desirable, but it is not strictly required given a short amount of time.

Academic Integrity: Any student caught cheating will receive a grade of zero for that exam/assignment and/or a failing grade for the course.

Some dates to keep in mind:

February 17: Referee report 1 is due
February 24: Research idea is due
March 4: Referee report 2 is due
March 18: Presentation of research proposal
March 30: Proposal write-up is due by email
April 1: Final exam

Outline of Topics (tentative)

Lecture 1. Trade-off, pecking order, and market timing theories of capital structure

1) Graham, John, 2000, How big are the tax benefits of debt? *Journal of Finance* 55, 1901-1941.
2) Fama, Eugene, and Kenneth French, 2002, Testing trade-off and pecking order predictions about dividends and debt, *Review of Financial Studies* 15, 1-33.
3) Frank, Murray and Goyal, Vidhan K., 2003, Testing the pecking order theory of capital structure, *Journal of Financial Economics* 67, 217-248.
4) Welch, Ivo, 2004, Capital structure and stock returns, *Journal of Political Economy* 112, 106-131.
5) Baker, Michael, and Wurgler, Jeffrey, 2002, Market timing and capital structure, *Journal of Finance* 57, 1-32.
6) Lemmon, Michael L., Roberts, Michael R., and Jaime F. Zender, 2008, Back to the beginning: Persistence and the cross-section of corporate capital structure, *Journal of Finance* 63, 1575-1608.
7) DeAngelo, Harry, and Richard Roll, 2015, How stable are corporate capital structures, *Journal of Finance* 70, 373-418 (s)
8) Baker, Michael, and Wurgler, Jeffrey, 2015, The risk anomaly tradeoff of leverage, working paper. (s)

Extra Topic 1: How to write a referee report?

Extra Topic 2: Standard Errors in Corporate Finance

Lecture 2. Can structural models explain capital structure evidence?

1) Glover, Brent, 2016, The expected cost of default, *Journal of Financial Economics,* forthcoming.
2) Strebulaev, Ilya, 2007, Do tests of capital structure mean what they say? *Journal of Finance* 62, 1747-1787.
3) Tserlukevich, Yuri, 2008, Can real options explain financing behavior? *Journal of Financial Economics 89*, 233-252.
4) Welch, Ivo, 2012, A critique of recent quantitative and deep-structure modeling in capital structure research and beyond, *Critical Finance Review* 2, 131-172.
5) Strebulaev, Ilya A., and Toni M. Whited , 2012, Dynamic corporate finance is useful: A comment on Welch *, Critical Finance Review* 2, 173–191 (s).

Lecture 3. Internal vs. external finance and corporate investment

1) Fazzari, Steven M., R. Glenn Hubbard, and Bruce C. Petersen, 1988, Financing constraints and corporate investment, *Brookings Papers on Economic Activity* 1988, 141-195.
2) Blanchard, Florencio Lopez-de-Silanes, and Andrei Shleifer, 1994, What do firms do with cash windfalls? *Journal of Financial Economics* 36, 337-360.
3) Kaplan, Steven, and Luigi Zingales, 1997, Do investment-cash flow sensitivities provide useful measures of financial constraints? *Quarterly Journal of Economics* 112, 169-215.

4) Rauh, Joshua D., 2006, Investment and financing constraints: Evidence from the funding of corporate pension plans, *Journal of Finance* 61, 33-71.
5) Babenko, Ilona, Michael Lemmon, and Yuri Tserlukevich, 2011, Employee stock options and investment, *Journal of Finance* 66, 981-1009.
6) Froot, Kenneth A., David S. Scharfstein, and Jeremy Stein, 1993, Risk management: Coordinating corporate investment and financing policies, *Journal of Finance* 48, 1629-58.
7) Perez-Gonzales, Francisco and Hayong Yun, 2013, Risk management and firm value: Evidence from weather derivatives, *Journal of Finance* 68, 2143-2176 (s).
8) Hadlock, Charles, and Joshua R. Pierce, 2010, New evidence on measuring financial constraints: Moving beyond the KZ index, *Review of Financial Studies* 23, 1909-1940 (s)
9) Farre-Mensa, Joan, and Alexander Linquist, 2016, Do measures of financial constraints measure financial constraints? *Review of Financial Studies* 29, 271-308 (s).

Lecture 4. Internal capital markets

1) Stein, Jeremy, 1997, Internal capital markets and competition for corporate resources, *Journal of Finance* 52, 111-133.
2) Berger, Philip G. and Eli Ofek, 1995, Diversification's effect on firm value, *Journal of Financial Economics 37, 39-65.*
3) Graham, John R., Lemmon, Michael L. and Jack G. Wolf, 2002, Does corporate diversification destroy value? *Journal of Finance* 57, 695-720.
4) Giroud, Xavier, 2013, Proximity and investment: Evidence from plant-level data, *Quarterly Journal of Economics*, 1-55.
5) Custodio, Claudia, 2014, Mergers and acquisitions accounting and the diversification discount, *Journal of Finance* 69, 219-240 (s).

Lecture 5. Dealing with endogeneity in empirical corporate finance (instrumental variables)

1) Becker, Bo, Henrik Cronqvist, and Rudiger Fahlenbrach, 2011, Estimating the effects of large shareholders using a geographic instrument, *Journal of Financial and Quantitative Analysis* 46, 907-942.
2) Bennedsen, Morten, Kasper 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*, 647-691.
3) Khan, Mozaffar, Leonid Kogan, and George Serafeim, 2012, Mutual fund trading pressure: Firm-level stock price impact and timing of SEOs, *Journal of Finance* 67, 1371-1395 (s).

4) Shue, Kelly, and Richard Townsend, 2014, Swinging for the fences: Executive reactions to quasi-random option grants, working paper (s).

Lecture 6. Dealing with endogeneity (regression discontinuity)

1) Chava, Sudheer, and Michael Roberts, 2008, How does financing impact investment? The role of debt covenants, *Journal of Finance* 63, 2085-2121.
2) Cunat, Vicente, Mireia Giné, and Maria Guadalupe, 2013, Say pays! Shareholder voice and firm performance, *Journal of Finance*, forthcoming.
3) Lee, David S., 2008, Randomized experiments from non-random selection in U.S. house elections, *Journal of Econometrics* 142, 675–697.
4) Keys, Benjamin J., Tanmoy Mukherjee, Amit Seru, and Vikrant Vig, 2010, Did securitization lead to lax screening? Evidence from subprime loans, *Quarterly Journal of Economics*, 307-362.

Lecture 7. Dealing with endogeneity (difference-in-difference, etc.)

1) Bertrand, Marianne, and Sendhil Mullainathan, 2003, Enjoying the quiet life? Corporate governance and managerial preferences, *Journal of Political Economy* 111, 1043-1075.
2) Bertrand, Marianne, Esther Duflo, and Sendhil Mullainathan, 2004, "How much should we trust difference-in-differences estimates?" *Quarterly Journal of Economics*
3) Derrien, Francois, and Ambrus Kecskes, 2013, The real effects of financial shocks: Evidence from exogenous changes in analyst coverage, *Journal of Finance* 68, 1407-1440.
4) Hennessy, Christopher A, and Ilya A. Strebulaev, 2015, Beyond random assignment: Credible inference of causal effects in dynamic economies, *NBER working paper*

Lecture 8. Capital structure and corporate strategy, product markets

1) Brander, James A., and Tracy R. Lewis, 1986, Oligopoly and financial structure: the limited liability effect, *American Economic Review* 76, 956-970.

2) Maksimovic, Vojislav, 1988, Capital structure in repeated oligopolies, *The RAND Journal of Economics* 19, 389-407.

3) Perotti, Enrico C., and Katryn E. Spier, 1993, Capital structure as a bargaining tool: The role of leverage in contract renegotiation, *American Economic Review* 83, 1131-1141.

4) Matsa, David, 2010, Capital structure as a strategic variable: Evidence from collective bargaining, *Journal of Finance* 65, 1197-1232.

5) Elena Simintzi , Vikrant Vig and Paolo Volpin , 2016, Labor Protection and Leverage, *Review of Financial Studies*, forthcoming (s).

6) Benmelech, Efraim, Nittai Bergman, and Ricardo Enriquez, 2012, Negotiating with Labor under Financial Distress, *Review of Corporate Finance Studies* 1, 28-67. (s)

Lecture 9. Executive compensation

1) Jensen, Michael, and Kevin Murphy, 1990, Performance pay and top-management incentives, *Journal of Political Economy* 98, 225-264.
2) Baker, George, and Brian Hall, 2004, CEO incentives and firm size, *Journal of Labor Economics* 22, 767-798.
3) Murphy, Kevin, and Jan Zabojnik, 2004, CEO pay and appointments: A market-based explanation for recent trends, *American Economic Review* 94, 92-196.
4) Bertrand, M., Mullainathan, Sendhil, 2001, Are CEOs rewarded for luck? The ones without principals are, *Quarterly Journal of Economics*, 116, 3, 901-32.
5) Bertrand, M., Schoar A., 2003, Managing with style: The effects of managers on firm policies, *Quarterly Journal of Economics* 118, 1169-1208.
6) Gabaix, Xavier, and Augustin Landier, 2008, Why has CEO pay increased so much? *Quarterly Journal of Economics* 123, 49-100.
7) Frydman, Carola, and Raven Saks, 2010, Executive Compensation: A new view from a long-term perspective, 1936-2005, *Review of Financial Studies* 23, 2099-2138.
8) Hayes, Rachel M, Michael L. Lemmon, and Mingming Qiu, 2012, Stock options and managerial incentives for risk-taking: Evidence from FAS 123R, *Journal of Financial Economics* 105, 174-190. (s)