UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
College of Business
DEPARTMENT OF FINANCE

FINANCE 594 – ADVANCED CORPORATE FINANCE
SYLLABUS – SPRING 2013

Instructor: Professor Dirk Hackbarth
Class Time: Fridays: 1:00-3:50pm
Class Location: 4001 BIF
E-mail: dhackbar@illinois.edu
Office: 4035 BIF
Office Hours: By appointment

BRIEF DESCRIPTION

This is a thorough doctoral level class on corporate finance, covering modern theoretical and empirical work. The course is designed as the second in a sequence of two corporate finance courses. At this stage, rather than explaining the underpinnings of corporate research (e.g., basic model/applications dealing with asymmetric information, agency problems, capital market frictions), we will go deeper in understanding "how to operationalize" research on concrete topics that are central to corporate finance, such as capital structure, mergers and acquisitions, the limits of the firm, investment, and much more. The class will also look at the interface between corporate finance and other research areas, such as asset pricing and banking. Among other things, the course is a blend of new approaches to modeling in corporate research (e.g., dynamic/structural models of financial policy with quantitative predictions) and new approaches to testing design (e.g., discontinuity designs and natural experiments). The goal is to give students a glimpse at the "state-of-the-art" of research in corporate finance and prepare them to do research in corporate finance using new methods and tools.

TEXT AND MATERIALS

There is no required textbook. Readings will be based on articles. Reading assignments will follow the sequence below. Papers anteceded by an asterisk (*) are strongly recommended and covered during lectures. The readings are nearly all available for free on the web (e.g., from JSTOR, SSRN, the journal's website, or the author's own website). Students can locate them using, e.g., Google Scholar.

GRADING

- Regular class participation: 20%
  All students are expected to have read prior to class in detail all the papers scheduled for discussion that day. Students need to come to the classroom with their minds on the

material being discussed. Just “showing up” for class <u>does not</u> count for class participation.

- Referee reports and home work assignments: 30%
  We will give guidelines regarding these assignments. On the referee reports, for example, we are looking for the students to mature on the art of writing reports. The first report will be on a paper that the professors have actually reviewed, so the students can later compare their assessment with that which decided the fate of the paper at a top journal. The second will be graded more “competitively” (as if the professors were editors at the journal and were ranking the referees). The best report will be copied and shared with all students (remaining anonymous). Referee reports are individual work, but other assignments may be done in pairs (fostering a sense of collaboration/co-authorship).
- Formal paper presentation and discussion (“mini AFAs”): 20%
  One class will be dedicated to emulating an AFA-like setting where students will present and discuss papers as if they were in a professional conference. Papers will be chosen among the “hottest/newest” WPs in circulation. Some students will present (defend) the papers as if they were their own work, while others will discuss (and criticize) the papers. Presentations and discussions will be tightly timed (we will cut you off if you go overtime) and they will have to look professional. This exercise is designed for the students demonstrate their full presentation/debating skills. This is simply a practice for the type of “ideas competition” you will see in the real world of academia.
- Research proposal(s) (paper + presentation): 30%
  More on this below.

<u>All students in the classroom</u> are expected to read the papers selected for each topic (in advance) and to participate in class discussion. Note: Auditors are expected to do all of the assignments of regular students, except the final project proposal and presentation.

INTENDED AUDIENCE

This course is largely intended to help prepare students for research in the area of corporate finance. However, all PhD students with an interest in Finance, Economics, and Accounting are welcome to take it. Hopefully, this course will be stimulating enough that you will become interested in writing a thesis in corporate finance (but you don’t have to!). It should certainly prepare you to be a researcher in the area. This is sort of a “prep school-type” course, where students will get preparation for their work as academics.

WEBPAGE

The course Webpage will contain this syllabus and some of the materials presented in class. The Web address is: https://compass.illinois.edu/ (Compass).

RESEARCH PROPOSAL

For many PhD students, the most difficult part of the program is the search for a dissertation topic. To gain some experience selecting research topics, one course requirement is to prepare a proposal for a project concerning issues we discuss in class. We hope that a set of research ideas will come to you as the course progresses. This set will presumably consist of multiple ideas in different stages. While some may be little more than preliminary (but hopefully thought-provoking) idea stubs, at least one should be in a more fully-formed stage by the end of the semester. For the latter, you should target writing down a document containing:

1) One or two pages motivating the idea/research question. You want to identify a question, explain why it is important that we know more about it (i.e., its implications for research in corporate finance, policy making, etc.), and make the case that the existing literature has overlooked the issue.
2) Once you motivate your research question, you need to think about the economics of your inquiry. This would probably take a page or two. For example, what are the tradeoffs involved? What kinds of corporate actions/consequences do they entail? Should we expect to verify them using real-world data? How to design an identification strategy for empirical testing? Should we check the idea via simulations? What are the exact methods we should use and why?
3) Anticipating the results: Based on priors, what results should be expected? (What if we find something else?) Discussing this should take a few paragraphs.
4) Add a literature review. In this profession, it is important that you recognize (and give credit to) those who did prior research in the area you want to do your first paper. Do a fair (not aggressive, but still critical) review of the literature in no more than three pages. The emphasis should be on establishing your case that the “void” in the literature is worth pursuing. Try to organize the papers in a compare/contrast format. Like all you do in the paper, use this to motivate the importance of your research question.
5) Take a page or two to discuss “implementation issues” such as data availability, sample construction, programming (computer capacity) needs, replicability, etc.
6) Have some preliminary results for us to discuss. These can be empirical results, simulations/calibrations, or anything that gives us “hope” that this is more than a bunch of nice-sounding ideas that will never see the light of day.
7) The last part of the requirement regarding this assignment is a presentation of your research idea. We are not expecting a paper that is going straight to a top journal. On the other hand, we expect the student to present something that shows that he/she was thoughtful, hardworking, and capable of coming up with a potentially fruitful research idea. We expect that the presentation will help all of these elements transpire. Accordingly, it is important that you prepare well for this last task of the course. We (the professors) will be judging you as a potential job candidate at a good research school.

Students may propose to work on a joint project with other students in the class, subject to instructors’ prior approval. It is also advisable (and expected) that students are communicating with us about their plans for the final project through the semester. Finally, conforming to requirements now being adopted by some outlets, all programs and data should be made available so results can be reproduced. (Put and turn in copies of the relevant files in a USB drive or CD.)

LIST OF TOPICS AND READING MATERIALS

1. Investment Under Uncertainty I (Foundations of Real Options)

Dixit, A., 1993, "The Art of Smooth Pasting," in J. Lesourne and H. Sonnenschein, eds.: Fundamentals of Pure and Applied Economics, Vol. 55, Routledge, London.

Dixit, A., 1992, "Investment and Hysteresis," *Journal of Economic Perspectives* 6, 107-132.

Dixit, A., 1991, "A Simplified Exposition of the Theory of Optimal Control of Brownian Motion," *Journal of Economic Dynamics and Control* 15, 657-673.

(*) Dixit, A. and R. Pindyck, 1994, Investment Under Uncertainty, Princeton, NJ: Princeton University Press, Chapters 1-6.

Dumas, B., 1991, "Super Contact and Related Optimality Conditions," *Journal of Economic Dynamics and Control* 15, 675-685.

(*) McDonald, R., and D. Siegel, 1986, "The Value of Waiting to Invest," *Quarterly Journal of Economics* 101, 707-728.

Pindyck, R., 1991, "Irreversibility, Uncertainty, and Investment," *Journal of Economic Literature* 29, 1110-1152.

2. Investment Under Uncertainty II (Applications of Real Options)

Abel, A. and J. Eberly, 1994, "A Unified Model of Investment under Uncertainty," *American Economic Review* 84, 1369-1384.

Abel, A. and J. Eberly, 1996, "Optimal Investment with Costly Reversibility," *Review of Economic Studies* 63, 581-593.

Abel, A. and J. Eberly, 1997, "An Exact Solution for the Investment and Value of a Firm Facing Uncertainty, Adjustment Costs, and Irreversibility," *Journal of Economic Dynamics and Control* 21, 831-852.

(*) Boyle, G., and G. Guthrie, 2003, "Investment, Uncertainty, and Liquidity," *Journal of Finance* 58, 2143-2166.

Brennan, M., and E. Schwartz, 1985, "Evaluating Natural Resource Investments," *Journal of Business* 58, 135–157.

Dixit, A., 1989, "Entry and Exit Decisions under Uncertainty," *Journal of Political Economy* 97, 620-638.

Dixit, A. and R. Pindyck, 1994, Investment Under Uncertainty, Princeton, NJ: Princeton University Press, Chapters 9 and 11.

Hugonnier, J., S. Malamud, and E. Morellec, 2012, “Capital Supply Uncertainty, Cash Holdings, and Investment,” Working Paper, EPFL.

Kisser, M., 2012, “Do All-Equity Firms Destroy Value by Holding Cash?” *Review of Finance*, Forthcoming.

Lambrecht, B., and W. Perraudin, 2003, “Real Options and Preemption under Incomplete Information,” *Journal of Economic Dynamics and Control* 27, 619-643.

Leahy, J., 1993, “Investment in Competitive Equilibrium: The Optimality of Myopic Behavior,” *Quarterly Journal of Economics* 108, 1005-1033.

Pindyck, R., 1988, “Irreversible Investment, Capacity Choice, and the Value of the Firm,” *American Economic Review* 78, 969-985.

3. Game Theory and Real Options

Back, K., and D. Paulsen, 2009, “Open-Loop Equilibria and Competition in Option Exercise Games,” *Review of Financial Studies* 22, 4531-4552.

Bustamente, M., 2009, “The Dynamics of Going Public,” *Review of Finance* 16, 577-618.

Grenadier, S., 1996, “The Strategic Exercise of Options: Development Cascades and Overbuilding in Real Estate Markets,” *Journal of Finance* 51, 1653-1679.

Grenadier, S., 1999, “Information Revelation through Option Exercise,” *Review of Financial Studies* 12, 95-129.

Grenadier, S., 2002, “Option Exercise Games: An Application to the Equilibrium Investment Strategies of Firms,” *Review of Financial Studies* 15, 691-721.

Grenadier, S., and A. Malenko, 2010, “A Bayesian Approach to Real Options: The Case of Distinguishing between Temporary and Permanent Shocks,” *Journal of Finance* 65, 1949-1986.

Grenadier, S., and N. Wang, 2005, “Investment Timing, Agency, and Information,” *Journal of Financial Economics* 75, 493-533.

Hackbarth, D., and B. Taub, 2012, “Does the Dearth of Mergers Mean More Competition?,” Working Paper, University of Illinois.

Lambrecht, B., and W. Perraudin, 2003, “Real Options and Preemption under Incomplete Information,” *Journal of Economic Dynamics and Control* 27, 619–643.

Morellec, E., and N. Schuerhoff, 2009, “Investment Timing and Financing under Asymmetric Information,” *Journal of Financial Economics* 99, 262-288.

Sannikov, Y., 2007, “Games with Imperfectly Observable Actions in Continuous Time,” *Econometrica* 75, 1285-1329.

4. Capital Structure, Credit Risk, and Debt Structure

Black, F., and J. Cox, 1976, “Valuing Corporate Securities: Some Effects of Bond Indenture Provisions,” *Journal of Finance* 31, 351-367.

Broadie, M., M. Chernov, and S. Sundaresan, 2007, “Optimal Debt and Equity Values in the Presence of Chapter 7 and Chapter 11,” *Journal of Finance* 62, 1341-1377.

Chen, N., and S. Kou, 2006, “Credit Spreads, Optimal Capital Structure, and Implied Volatility with Endogenous Default and Jump Risk,” *Mathematical Finance* 19, 343–378.

(*) Choi, J., D. Hackbarth, and J. Zechner, 2012, “Granularity of Corporate Debt: Theory and Tests,” Working Paper, University of Illinois.

Duffie, D., and D. Lando, 2001, “Term Structures of Credit Spreads with Incomplete Accounting Information,” *Econometrica* 69, 633-664.

Fan, H., and S. Sundaresan, 2000, “Debt Valuation, Renegotiation, and Optimal Dividend Policy,” *Review of Financial Studies* 13, 1057-1099.

Fulghieri, P., D. Garcia, and D. Hackbarth, 2012, “Asymmetric Information and the Pecking (Dis)Order,” Working Paper, UNC.

Gorbenko, A., and I. Strebulaev, 2010, “Temporary vs. Permanent Shocks: Explaining Corporate Financial Policies,” *Review of Financial Studies* 23, 2591-2647.

(*) Hackbarth, D., J. Miao, and E. Morellec, 2006, “Capital Structure, Credit Risk, and Macroeconomic Conditions,” *Journal of Financial Economics* 82, 519-550.

Hackbarth, D., C. Hennessy, and H. Leland, 2007, “Can the Tradeoff Theory Explain Debt Structure?” *Review of Financial Studies* 20, 1213-1252.

Hackbarth, D., 2008, “Managerial Traits and Capital Structure Decisions,” *Journal of Financial and Quantitative Analysis* 43, 843-882.

Hege, U., and P. Mella-Barral, 2005, “Repeated Dilution of Diffusely Held Debt,” *Journal of Business* 78, 737-786.

Korteweg, A., 2010, “The Net Benefits to Leverage,” *Journal of Finance* 65, 2137-2170.

Lambrecht, B., and S. Myers, "Debt and Managerial Rents in a Real-Options Model of the Firm," *Journal of Financial Economics* 89, 209-231.

(*) Leland, H., 1994, "Corporate Debt Value, Bond Covenants, and Optimal Capital Structure," *Journal of Finance* 49, 1213-1252.

Leland H., 1998, "Agency Costs, Risk Management, and Capital Structure," *Journal of Finance* 53, 1213-1243.

Manso, G., B. Strulovici, and A. Tchistyi, 2010, "Performance-Sensitive Debt," *Review of Financial Studies* 23, 1819-1854.

Mella-Barral, P., and W. Perraudin, 1997, "Strategic Debt Service," *Journal of Finance* 52, 531-556.

Miao, J., 2005, "Optimal Capital Structure and Industry Dynamics in Stationary Equilibrium," *Journal of Finance* 60, 2621-2659.

Morellec, E., 2001, "Asset Liquidity, Capital Structure and Secured Debt," *Journal of Financial Economics* 61, 173-206.

Morellec, E., 2004, "Can Managerial Discretion Explain Observed Leverage Ratios?" *Review of Financial Studies* 17, 257-290.

Pennacchi, G., 2008, Theory of Asset Pricing, Boston, MA: Addison-Wesley, Chapter 18.

5. Dynamic Capital Structure and Dynamic Corporate Finance

Bhamra, H., L. Kuehn, and I. Strebulaev, 2010, "The Aggregate Dynamics of Capital Structure and Macroeconomic Risk," *Review of Financial Studies* 23, 4187-4241.

(*) Fischer, E., R. Heinkel, and J. Zechner, 1989, "Dynamic Capital Structure Choice: Theory and Tests," *Journal of Finance* 44, 19-40.

Goldstein, R., N. Ju, and H. Leland, 2001, "An EBIT-Based Model of Dynamic Capital Structure," *Journal of Business* 64, 483-512.

Hugonnier, J., S. Malamud, and E. Morellec, 2012, "Credit Market Frictions and Capital Structure Dynamics," Working Paper, EPFL.

Strebulaev, I., and A. Kurshev, 2012, "Firm Size and Capital Structure," Working Paper, Stanford University.

(*) Strebulaev, I., 2007, "Do Tests of Capital Structure Mean What They Say?" *Journal of Finance* 62, 1747-1787.

Strebulaev, I. and T. Whited, 2012, “Dynamic Corporate Finance is Useful: A Comment on Welch,” *Critical Finance Review*, Forthcoming.

Welch, I., 2012, “A Critique of Recent Quantitative and Deep-Structure Modeling in Capital Structure Research and Beyond,” *Critical Finance Review*, Forthcoming.

6. Interactions between Financing and Investment

Bolton, P., H. Chen, and N. Wang, 2011, “A Unified Theory of Tobin’s Q, Corporate Investment, Financing, and Risk Management,” *Journal of Finance* 66, 1545-1578.

Bolton, P., H. Chen, and N. Wang, 2012, “Market Timing, Investment, and Risk Management,” *Journal of Financial Economics*, Forthcoming.

Campello, M., and D. Hackbarth, 2012, “The Firm-Level Credit Multiplier,” *Journal of Financial Intermediation* 21, 446-472.

Chen, H., and G. Manso, 2012, “Macroeconomic Risk and Debt Overhang,” Working Paper, MIT.

Gamba, A., and A. Trianits, 2008, “The Value of Financial Flexibility,” *Journal of Finance* 63, 2263-2296.

Hackbarth, D., 2009, “Determinants of Corporate Borrowing: A Behavioral Perspective,” *Journal of Corporate Finance* 15, 389-411.

(*) Hackbarth, D., and D. Mauer, 2012, “Optimal Capital Structure, Debt Structure, and Investment,” *Review of Financial Studies* 25, 747-796.

Hennessy, C., 2004, “Tobin’s Q, Debt Overhang, and Investment,” *Journal of Finance* 59, 1717-1742.

(*) Hennessy, C., and T. Whited, 2005, “Debt Dynamics,” *Journal of Finance* 60, 1129-1165.

(*) Hennessy, C., and T. Whited, 2007, “How Costly is External Financing? Evidence from a Structural Estimation,” *Journal of Finance* 62, 1705-1743.

Manso, G., 2008, “Investment Reversibility and Agency Cost of Debt,” *Econometrica* 76, 437-442.

Mauer, D., and S. Ott, 2000, “Agency Costs, Underinvestment, and Optimal Capital Structure: The Effect of Growth Options to Expand,” in M. Brennan and L. Trigeorgis, eds.: Project Flexibility, Agency, and Competition, Oxford, UK: Oxford University Press.

Mauer, D., and A. Triantis, 1994, “Interactions of Corporate Financing and Investment Decisions: A Dynamic Framework,” *Journal of Finance* 49, 1253-1277.

Mello, A. and J. Parsons, 1992, “Measuring the Agency Cost of Debt,” *Journal of Finance* 47, 1887-1904.

Morellec, E., and N. Schuerhoff, 2010, “Dynamic Investment and Financing under Personal Taxation,” *Review of Financial Studies* 23, 101-146.

(*) Morellec, E., and N. Schuerhoff, 2011, “Corporate Investment and Financing under Asymmetric Information,” *Journal of Financial Economics* 99, 262-288.

Morellec, E., P. Valta, and A. Zhdanov, 2012, “Financing Investment: The Choice between Public and Private Debt,” Working Paper, EPFL.

Titman, S., and S. Tsyplakov, 2007, “A Dynamic Model of Optimal Capital Structure,” *Review of Finance* 11, 359-400.

Tserlukevich, Y., 2008, “Can Real Options Explain Financing Behavior?” *Journal of Financial Economics* 89, 232-252.

7. Boundaries of the Firm and Mergers and Acquisitions

Almeida, H., M. Campello, and D. Hackbarth, 2011, “Liquidity Mergers,” *Journal of Financial Economics* 102, 526-558.

Alvarez, L., and R. Stenbacka, 2006, “Takeover Timing, Implementation Uncertainty, and Embedded Divestment Options,” *Review of Finance* 10, 417-441.

Bernile, G., E. Lyandres, and A. Zhdanov, 2012, “A Theory of Strategic Mergers,” *Review of Finance*, 16, 517-575.

Habib, M., and P. Mella-Barral, 2012, “Skills, Core Capabilities, and the Choice between Merging, Allying, and Trading Assets,” *Journal of Mathematical Economics*, Forthcoming.

(*) Hackbarth, D., and J. Miao, 2012, “The Dynamics of Mergers and Acquisitions in Oligopolistic Industries,” *Journal of Economic Dynamics and Control* 36, 585-609.

(*) Hackbarth, D., R. Mathews, and D. Robinson, 2012 “Capital Structure, Product Market Dynamics, and the Boundaries of the Firm,” Working Paper, Duke University.

Hsieh, J., E. Lyandres, and A. Zhdanov, 2011, “A Theory of Merger-Driven IPOs,” *Journal of Financial and Quantitative Analysis* 46, 1367-1405.

Lambrecht, B., 2004, "The Timing and Terms of Mergers Motivated by Economies of Scale," *Journal of Financial Economics* 72, 41-62.

Margrabe, W., 1978, "The Value of the Option to Exchange One Asset for Another," *Journal of Finance* 33, 177-186.

Margsiri, W., A. Mello, and M. Ruckes, 2008, "A Dynamic Analysis of Growth via Acquisitions," *Review of Finance* 12, 635-671.

(*) Morellec, E., and A. Zhdanov, 2005, "The Dynamics of Mergers and Acquisitions," *Journal of Financial Economics* 77, 649-672.

Morellec, E., and A. Zhdanov, 2008, "Financing and Takeover," *Journal of Financial Economics* 87, 556-581.

8. Boundaries of the Firm and Internal Capital Markets

(*) Berger, Philip, and Eli Ofek, 1995, "Diversification's Effect on Firm Value," *Journal of Financial Economics* 37, 39-65.

(*) Campa, J., and S. Kedia, 2001, "Explaining the Diversification Discount," *Journal of Finance* 57, 1731-1762.

(*) Campello, M., 2002, "Internal Capital Markets in Financial Conglomerates: Evidence from Small Bank Responses to Monetary Policy," *Journal of Finance* 57, 2773-2805.

Chevalier, J., 2004, "What Do We Know About Cross-subsidization? Evidence from Merging Firms" *B.E. Journal of Economic Analysis and Policy* 4, article #3.

Comment, R., and G. Jarrell, 1995, "Corporate Focus and Stock Returns," *Journal of Financial Economics* 37, 67-87.

Dimitrov, V. and S. Tice, 2006, "Corporate Diversification and Credit Constraints: Real Effects Across the Business Cycle," *Review of Financial Studies* 19, 1465-1498.

Fee, E., C. Hadlock, and J. Pierce, 2009, "Investment, Financing Constraints, and Internal Capital Markets: Evidence from the Advertising Expenditures of Multinational Firms," *Review of Financial Studies* 22, 2361-2392.

Gertner, R., D. Scharfstein, and J. Stein, 1994, "Internal versus External Capital Markets," *Quarterly Journal of Economics* 109, 1211-1230.

Graham, J., M. Lemmon, and J. Wolf, 2002, "Does Corporate Diversification Destroy Value?" *Journal of Finance* 57, 695-720.

Klein B., R. Crawford, and A. Alchian, 1978, "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process," *Journal of Law and Economics* 22, 297-326.

(*) Lamont, O., 1997, "Cash Flow and Investment: Evidence from Internal Capital Markets,"' *Journal of Finance* 52, 83-110.

(*) Lang, L., and R. Stulz, 1994, "Tobin's q, Corporate Diversification and Firm Performance," *Journal of Political Economy* 102, 1248-1280.

(*) Maksimovic V., and G. Phillips, 2002, "Do Conglomerate Firms Allocate Resources Inefficiently Across Industries? Theory and Evidence," *Journal of Finance* 57, 721-776.

Ozbas, O., and D. Scharfstein, 2009, "Evidence on the Dark Side of Internal Capital Markets," *Review of Financial Studies*, forthcoming.

Rajan, R., H. Servaes, and L. Zingales, 2000, "The Cost of Diversity: The Diversification Discount and Inefficient Investment," *Journal of Finance* 55, 35-80.

(*) Scharfstein, D., and J. Stein, 2000, "The Dark Side of Internal Capital Markets: Divisional Rent Seeking and Inefficient Investment," *Journal of Finance* 55, 2537-2564.

(*) Shin, H.-H., and R. Stulz, 1998, "Are Internal Capital Markets Efficient?" *Quarterly Journal of Economics* 113, 531-552.

(*) Stein, J., 1997, "Internal Capital Markets and the Competition for Corporate Resources," *Journal of Finance* 52, 111-133.

(*) Villalonga, B., 2004, "Does Diversification Cause the Diversification Discount," *Financial Management* 33, 5-23

Villalonga, B., 2004, "Diversification Discount or Premium? New Evidence from the Business Information Tracking Series," *Journal of Finance* 59, 475-502.

9. Empirical Methods in Corporate Finance I

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.

Angrist, Joshua D., and Jorn-Steffen Pischke, 2009, <u>Mostly Harmless Econometrics</u>, Princeton, NJ: Princeton University Press, Chapter 5.2.

(*) Becker, Bo, and Per Stromberg, 2012, "Fiduciary Duties and Equity-Debtholder Conflicts," *Review of Financial Studies* 25, 1931-1969.

Bertrand, M., E. Duflo, and S. Mullainathan, 2004, "How Much Should We Trust Differences-in-Differences Estimates?" *Quarterly Journal of Economics* 119, 249-275.

(*) Bertrand, M., and S. Mullainathan, 2003, "Enjoying the Quiet Life? Corporate Governance and Managerial Preferences," *Journal of Political Economy* 111, 1043-1075.

Butler, Alexander, and Jess Cornaggia, 2011, "Does Access to External Finance Improve Productivity? Evidence from a Natural Experiment," *Journal of Financial Economics* 99, 184-203.

Gormley, Todd A., and David Matsa, 2011, "Growing Out of Trouble? Corporate Responses to Liability Risk," *Review of Financial Studies* 24, 2781-2821.

(*) Jayaratne, J., and P. Strahan, 1996, "The Finance-Growth Nexus: Evidence from Bank Branch Deregulation," *Quarterly Journal of Economics* 111, 639-670.

LaPorta, R, F. Lopez-De-Silanes, A. Shleifer, R. Vishny, 1998, "Legal Determinants of External Finance." *Journal of Finance* 52, 1131-1150.

Roberts, Michael R., and Toni M. Whited, 2011, "Endogeneity in Empirical Corporate Finance," in George Constantinides, Rene Stulz, and Milton Harris, eds.: <u>Handbook of the Economics of Finance</u> Vol. 2., New York, NY: Elsevier, Section 4.

10. Empirical Methods in Corporate Finance II

(*) Almeida, Heitor, Vyacheslav Fos, and Mathias Kronlund, 2012, "The Real Effects of Share Repurchases" Working Paper, University of Illinois.

Angrist, Joshua D., and Jorn-Steffen Pischke, 2009, <u>Mostly Harmless Econometrics</u>, Princeton, NJ: Princeton University Press, Chapter 6.

Bakke, Tor-Erik, and Toni Whited, 2012, "Threshold Events and Corporate Policies," *Journal of Finance* 67, 1083-1111.

Chava, S., and M. Roberts, 2008, "How does Financing Impact Investment? The Role of Debt Covenants," *Journal of Finance* 63, 2085-2121.

(*) Cuñat, Vicente, Mireia Gine and Maria. Guadalupe, 2012, "The Vote Is Cast: The Effect of Corporate Governance on Shareholder Value," *Journal of Finance* 67, 1943-1977.

(*) Keys, Benjamin, Ranmoy Mukherjee, Amit Seru, and Vikrant Vig, 2010, "Did Securitization Lead to Lax Screening? Evidence from Subprime Loans," *Quarterly Journal of Economics* 125, 307-362.

Rauh, J., 2006, "Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans." *Journal of Finance* 61, 33-71.

(*) Roberts, Michael R. and Amir Sufi, 2009, "Control Rights and Capital Structure: An Empirical Investigation," *Journal of Finance* 64, 1657-1695.

Roberts, Michael R., and Toni M. Whited, 2011, "Endogeneity in Empirical Corporate Finance," in George Constantinides, Rene Stulz, and Milton Harris, eds.: <u>Handbook of the Economics of Finance</u> Vol. 2., New York, NY: Elsevier, Section 5.

11. Empirical Methods in Corporate Finance III

(*) Chhaochharia, Vidhi and Grinstein, Yaniv, 2009, "CEO Compensation and Board Structure," Journal of Finance, 64, 231-261.

Guthrie, Katherine, Sokolowsky, Jan, and Wan, Kam-Ming, 2012, "CEO Compensation and Board Structure Revisited," Journal of Finance, 67, 1149-1168.

(*) Gompers , Paul A., Ishii , Joy L., and Metrick, Andrew, 2003, "Corporate Governance and Equity Prices," Quarterly Journal of Economics 118, 107-155.

Core, John E., Guay, Wayne R, and Rusticu, Tjomme O., 2006 "Does Weak Governance Cause Weak Stock Returns? An Examination of Firm Operating Performance and Investors' Expectations," Journal of Finance, 61, 655-687.

(*) Hertzberg , Andrew, Liberti, Jose Maria , and Paravisini, Daniel, 2011, "Public Information and Coordination: Evidence from a Credit Registry Expansion," Journal of Finance, 66, 379-412.

(*) Heckman, James, 1978, "Dummy endogenous variables in a simultaneous equation system," Econometrica, 46(4), 931-959.

Fos, Vyacheslav, 2013, "The Disciplinary Effects of Proxy Contests," Working Paper, University of Illinois..

Fos, Vyacheslav and Tsoutsoura, Margarita, 2013, "The Disciplinary Effects of Proxy Contests," Working Paper, University of Illinois.

12. Corporate Finance and Asset Pricing

Aguerrevere, F., 2009, "Real Options, Product Market Competition, and Asset Returns," *Journal of Finance* 64, 957-983.

Bena, J., and L. Garlappi, 2012, "Corporate Innovation and Returns," Working Paper, University of British Columbia.

Berk, J., R. Green, and V. Naik, 1999, "Optimal Investment, Growth Options, and Security Returns," *Journal of Finance* 54, 1553-1607.

Berk, J., R. Green, and V. Naik, 2004, "The Valuation and Return Dynamics of New Ventures," *Review of Financial Studies* 17, 1-35.

Bhamra, H., L. Kuehn, and I. Strebulaev, 2010, "The Levered Equity Risk Premium and Credit Spreads: A Unified Framework," *Review of Financial Studies* 23, 645-703.

Bustamente, C., 2012, "Strategic Investment, Industry Concentration, and the Cross Section of Returns," Working Paper, London School of Economics.

Carlson, M., A. Fisher, and R. Giammarino, 2005, "Corporate Investment and Asset Price Dynamics: Implications for the Cross-Section of Returns," *Journal of Finance* 59, 2577-2603.

(*) Carlson, M., A. Fisher, and R. Giammarino, 2006, "Corporate Investment and Asset Price Dynamics: Implications for SEO Event Studies and Long-Run Performance," *Journal of Finance* 61, 1009-1034.

Carlson, M., A. Fisher, and R. Giammarino, 2010, "SEO Risk Dynamics," *Review of Financial Studies* 23, 4026-4077.

Chen, H., 2010, "Macroeconomic Conditions and the Puzzles of Credit Spreads and Capital Structure," *Journal of Finance* 65, 2171–2212.

(*) Chen, H., X. Yu, and J. Yang, 2012, "Systematic Risk, Debt Maturity, and the Term Structure of Credit Spreads," Working Paper, MIT.

Chen, L., P. Collin-Dufresne, and R. Goldstein, 2009, "On the Relation Between the Credit Spread Puzzle and the Equity Premium Puzzle," *Review of Financial Studies* 22, 3367-3409.

Cooper, Ilan, 2006, "Asset Pricing Implications of Non-Convex Adjustment Costs and Irreversibility of Investment," *Journal of Finance* 61, 139-170.

Garlappi, L., T. Shu, and H. Yan, 2008, "Default Risk, Shareholder Advantage, and Stock Returns," *Review of Financial Studies* 21, 2743-2778.

Garlappi, L., and H. Yan, 2010, "Financial Distress and the Cross-Section of Equity Returns," *Journal of Finance*, forthcoming.

(*) Gomes, J., and L. Schmid, 2008, "Levered Returns," *Journal of Finance*, forthcoming.

Gomes, J., and L. Schmid, 2010, "Equilibrium Credit Spreads and the Macroeconomy," Working Paper, Duke University.

(*) Hackbarth, D., and E. Morellec, 2008, "Stock Returns in Mergers and Acquisitions," *Journal of Finance* 63, 1213-1252.

(*) Hackbarth, D., and T. Johnson, 2012, "Real Options and Risk Dynamics," Working Paper, University of Illinois.

Hackbarth, D., Haselmann, R., and D. Schoenherr, 2012, "Distress Risk, Stock Returns, and the 1978 Bankruptcy Reform Act," Working Paper, University of Illinois.

Li, E., 2007, "Corporate Governance, the Cross Section of Returns, and Financing Choices," Working Paper, University of Michigan.

Ozdagli, A., 2012, "Financial Leverage, Corporate Investment, and Stock Returns," *Review of Financial Studies* 25, 1033-1069.

Ozdagli, A., 2012, "Distressed But Not Risky," Working Paper, Federal Reserve Bank of Boston.

Sagi, J., and M. Seasholes, 2007, "Firm Specific Attributes and the Cross-Section of Momentum," *Journal of Financial Economics* 84, 389-434.