Title

The Interaction of Finance and Industrial Organization

Lecturer

Gordon M. Phillips (University of Southern California)

Date of Event

June 24-28 2013

Outline

The primary topics of the course concern the interaction between the firm's real decisions and its financial decisions in different equilibrium industrial organization settings. This course involves a fair amount of microeconomics and industrial organization in addition to finance. Both theoretical articles and empirical articles will be covered and discussed. We will emphasize the link between theoretical and empirical research in both industrial organization and corporate finance.

The course will be taught over 5 days – indicated by "d1" to "d5". There will be 3 90 minute sessions per day.

NOTE: Please carefully read and outline the first 7 starred articles before our 1st class. You will also turn a write-up on either article "d1,a3" or "d1,a4".

We will primarily be using articles for the course. Each section will have background material and class articles which gives some finance citations which do *not* consider the interaction of finance and industry product markets. These background materials are not required for the course but you should consult these citations to understand fully the more advanced articles. Also other background articles are on the syllabus that may be of interest but will not be covered but are included for your interest. In general, I have tried to organize articles within sections by development of "themes" in the literature. Thus, articles do **not** necessarily proceed chronologically within sections - but do in most cases proceed chronologically by class session.

<u>Readings</u>
During the course we will cover in depth the * articles with day and article indicators. Please read these carefully. We will cover about 5 articles in depth for each day in depth and give an overview of some of the others. (* articles with *(dX, aX) should be read. This notation indicates session and article. <u>For example (d1,a1) stands for *(session or day 1, article 1))</u>

<u>Review Assignments:</u>
<u>You will also be responsible for turning in 2-page write-ups on 2 of the articles each day – I will indicate which articles from which to choose on the syllabus.</u> I would like you to rotate between theoretical articles and empirical articles. The write-up should not just summarize the article. It should identify what the major contribution is, identify the solution technique or econometric methodology used, discuss in depth any potential limitations (modeling limitations or unrealistic assumptions or methodological problems) of the papers and also discuss how one could extend the paper by identifying unanswered questions.
The course grade will be based on these handin "referee reports", participation in class (with some presentations possible) total 50%, and a take-home final exam (50%).

Background textbooks:
In addition, to supplement your microeconomics training, you may want to purchase the following book on Industrial Organization. It has very good presentations of basic industrial organization modeling. It is:

The Theory of Industrial Organization, Jean Tirole, MIT Press.

Also useful is:

The Theory of Corporate Finance, *Jean Tirole*, Princeton University Press

OUR SCHEDULE

NOTE: Please carefully read and outline the first 7 starred articles before our 1st class. You will also turn a write-up on either article "d1,a3" or "d1,a4". You may want to read ahead for the 2nd and 3rd days as well.

Section 1: Theory of the Firm: From Perfect Markets to Contracting Problems and Information Problems

a. (Day 1) Transaction Costs and Agency Theories of the Firm
* (d1, a1) Williamson, Oliver E., 1983, Transaction-Cost Economics: The Governance of Contractual Relations, Journal of Law and Economics, 233-261.
*************** Background articles by Williamson, not covered ******
Williamson, Oliver E., 1967, Hierarchal control and optimum firm size, Journal of Political Economy, 75: 123-138.
-----, 1971, The vertical Integration of production: Market failure considerations, American Economic Review, 61, 112-123.
Also, "Transaction Cost Economics" , Handbook of Industrial Organization , Chapter 3, Volume 1.
* (Classic article, read if you haven't covered it already) Jensen, M. and W. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics.* 1976, 3:305-360.
*(d1, a2) Klein, Benjamin, Robert Crawford, and Armen A. Alchian, Vertical Integration, Appropriable Rents and the Competitive Contracting Process, *Journal of Law and Economics* 21, 1978, 297–326.
(background article, not covered) Masten, Scott E., 1993, Transaction Costs, Mistakes, and Performance, *Managerial and Decision Economics*, *14*, 119-129.
The following is a review article that I recommend also looking at.
(review chapter, covered indirectly through the articles, may be of use) Holmstrom and Tirole, 1989, The Theory of the Firm, Handbook of Industrial Organization, Chapter 2. Volume 1.

b. Firm Ownership, Incomplete Contracts and the Property Rights Theory of the Firm (Day 1 continued)
* (d1, a3, write-up choice) Grossman, Sanford and Oliver Hart, 1986, The costs and benefits of ownership: A theory of vertical and horizontal integration, *Journal of Political Economy* 94, 691-719.
Hart, Oliver and J. D. Moore, 1990, Property Rights and the Nature of the Firm, Journal of Political Economy, 98, 1119-58.
(good summery article, not covered) Whinston, Michael, On the transaction cost determinants of vertical integration, Journal of Law, Economics, and Organization, 2003
(Not covered, this is a review article) Harris, M. and Raviv, A. (1992), "Financial Contracting Theory", in J. Laffont (ed.) Advances in Economic Theory:. Sixth World Congress, Vol. II
*(d1, a4, write-up choice) Kaplan, Steven N. and Per Stromberg, 2003, Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts, published, Review of Economic Studies.

* (d1, a5) Allen, Jeff and Gordon Phillips, 2000, Corporate Equity Ownership, Strategic Relationships and Product Market Relationships, *Journal of Finance*. *Paper available on SSRN (more complete version)*.
* (covered if we have time) C. Edward Fee and Charles Hadlock, Shawn Thomas, "Corporate Equity Ownership and the Governance of Product Market Relationships", *Journal of Finance*, 2006, vol. 61, issue 3, pages 1217-1251
Other Extra articles that may be of interest (not covered in class, note no "*")
Rajan, Rajhuram, G. and Luigi Zingales, 1998, Power in a theory of the firm, *Quarterly Journal of Economics* 113, 387-432.
Kale, Jayant and Husayn Shahrur , 2006, "Corporate capital structure and the characteristics of suppliers and customers" JFE.

****
****** DAY 2 BEGINS HERE ******
****

c. Managerial Ownership and Firm Competition
(background to a6) Hart, O., 1983, "The Market Mechanism as an Incentive Scheme," *Bell Journal of Economics*. 366-82.
* (d2, a1, write-up choice) Scharfstein, D., "Product Market Competition and Managerial Slack," *Rand Journal of Economics*. 1988, 19:147-155.
* (d2, a2) Fershtman, Chaim and Kenneth L. Judd, "Equilibrium Incentives in Oligopoly," American Economic Review, 1987, 77, 927-940.
* (d2, a3) Aggarwal, Rajesh, and Andrew Samwick, Executive Compensation, Strategic Competition, and Relative Performance Evaluation: Theory and Evidence," *Journal of Finance*, 54 (December 1999), 1999-2043.
* (d2, a4. write-up choice) Holger Meuller (NYU) and Xavier Giroud., recent Does Corporate Governance Matter in Competitive Industries?, http://www.stern.nyu.edu/%7Ehmueller/papers/pmc.pdf. Journal of Finacial Economics, 2010.

Section 2: Financing Decisions, Capital Structure and Product Markets
Day 2 (continued) and Day 3:
(Just review, not covered in class) Miller, Merton H., 1988, "The Modigliani-Miller Propositions After Thirty Years," *Journal of Economic Perspectives*. 2:99-120. (with comments following by Joseph Stiglitz, Stephen Ross, Sudipto Bhattacharya, and Franco Modigliani.)

Part 1: External Contracting Problems, Intra-Industry Focus
a. Contracting and Capital Structure
(Classic article, not covered, read if you have not already) Myers, S., "The Capital Structure Puzzle," *Journal of Finance*. July, 1984, 39:575-592.
(Classic article, not covered, read if you have not already) Myers, Stewart C., and Nicholas S. Majluf, 1984, Corporate financing and investment decisions when the firm has information that investors do not have, Journal of Financial Economics} 13, 187-221
(Survey article, read but not covered in class) Harris, Milton and Artur Raviv, 1991, "The Theory of Capital Structure," *Journal of Finance*. 46: 297-355.
(d2, background) Titman, Sheridan, 1984, "The effect of capital structure on a firm's liquidation decision," *Journal of Financial Economics*, Vol. 13, 137-151.
*(d2, a5, write-up choice) Maksimovic, Vojislav; Titman, Sheridan, "Financial Policy and Reputation for Product Quality," *Review of Financial Studies*; 4(1), 1991, pages 175-200.
*(d2, a6, write-up choice) Phillips, Gordon and Giorgo Sertsios, 2011, "How Do Firm Financial Conditions Affect Product Quality and Pricing?" available at:
http://www.smith.umd.edu/faculty/gphillips/Papers/Airline_Quality.pdf

****
**** DAY 3 BEGINS HERE ****
****

Part 2: Intra-Industry firm competition and Capital Structure
b. Financial Structure and Intra-Industry competition

* (d3, a1) Brander, James A., and Tracy R. Lewis, 1986, "Oligopoly and financial structure," American Economic Review. 76, 956-970.
----, (1988), "Bankruptcy costs and the theory of oligopoly," Canadian Journal of Economics 21(2), 221-243.
*(d3, recommend background article) Maksimovic, Vojislav, 1988, "Capital structure in repeated oligopolies," Rand Journal of Economics. 19, 389-407.
* (d3, a2, write-up choice) Bolton, Patrick and David S. Scharfstein, 1990, "A theory of predation based on agency problems in financial contracting," American Economic Review. 80, 93-106.
*(d3, a3, write-up choice) Phillips, Gordon, 1995, "Increased Debt and Industry Product Markets: An Empirical Analysis," *Journal of Financial Economics*, 37, 189-238. Download full PDF: Click Here.
(background article) Phillips, Gordon, and Dan Kovenock, 1995, "Capital Structure and Product Market Rivalry: How Do We Reconcile Theory and Evidence?", with Dan Kovenock, *American Economic Review*, 1995, 85, 403-408. Download full PDF: Click Here.
*(d3, a4) Chevalier, Judith, 1995, "Do LBO Supermarkets Charge More? An Empirical Analysis of the Effects of LBOs on Supermarket Pricing," *Journal-of-Finance;* 50(4), September 1995, pages 1095-1112.
*(d3, a5) Kovenock, Dan and Phillips, Gordon, 1997, "Capital Structure and Product Market Rivalry: An Examination of Plant Closing and Investment Decisions," with Dan Kovenock, Review of Financial Studies, 1997, Volume 10:3. . Download PDF file: Click Here
* (d3, a6) David Matsa, 2010, **Capital Structure as a Strategic Variable: Evidence from Collective Bargaining**,. Journal of Finance,

Day 3 (continued, industry equilibrium articles)

* (background to d3, a7) Maksimovic, Vojislav and Josef Zechner, 1991, "Debt, Agency Costs, and Industry Equilibrium," Journal of Finance, 46: 1619-1644.
*(d3, a7, OR will be covered as d4, a1 depending on time) **Mackay, Peter and Gordon Phillips, 2005, "How Does Industry Affect Firm Financial Structure?"** Click here to download in Adobe PDF Format., Review of Financial Studies.

Other Extra articles that may be of interest (not covered in class, note no "*")

Bresnahan, Timothy F., 1989, "Empirical studies of industries with market power," In Handbook of Industrial Organization. ed. R. Schmalensee and R. Willig, North-Holland, Amsterdam.
Glazer, Jacob, 1994, "The Strategic Effects of Long-Term Debt in Imperfect Competition," Journal of Economic Theory; 62(2), April 1994, pages 428-43.
Campello, M., Capital Structure and Product Markets Interactions: Evidence from Business Cycles , *Journal of Financial Economics* 68 (3), 2003, pp. 353-378.
Chevalier, Judith, 1995, "Debt and product market competition: Local market entry, exit, and expansion decisions of supermarket chains." *American Economic Review*, 85, 415-35.
Khanna, Naveen and Sheri Tice, 2005, “Pricing, Exit, and Location Decisions of Firms: Evidence on the Role of Debt and Operating Efficiency”, Journal of Financial Economics.
Campello, M., Debt Financing: Does it Boost or Hurt Performance in Product Markets? *Journal of Financial Economics*, 2006.
Bresnahan, Timothy, 1982, "The oligopoly solution concept is identified," Economic Letters. 10, 87-92.
Fudenburg, Drew and Jean Tirole, 1986, "A signal jamming' theory of predation" Rand Journal of Economics. 17, 366-376.
Poitevin, Michel, 1989, "Financial signaling and the "deep-pocket" argument," Rand Journal of Economics. 20, 26-40.

Rotemberg, Julio J. and David S. Sharfstein, 1990, "Shareholder Value Maximization and Product Market Competition," RFS, 3:367-91.
(review article) Maksimovic, V., 1995, Financial Structure and Product Market Competition, in Jarrow, R., Maksimovic V. and W. Ziemba, (eds.), Handbook of Finance, North-Holland.
Zingales, Luigi, 1998, "Survival of the fittest or the fattest? Exit and financing in the trucking industry,.*Journal if Finance*.

Stomper, Alexander, Christine Zulehner, and Pegaret Pichler, "Why leverage affects pricing", RFS 2008.

Other extra articles on capital structure (not covered in class):

1. Rajan, Raghu and Luigi Zingales, 1995, "What do We Know about Capital Structure,? Some Evidence from International Data", Journal of Finance 50, 1421-1460.
2. Graham, John R. and C.R. Harvey, 2001, The theory and practice of corporate finance: The evidence from the field, *Journal of Financial Economics*
3. Shyam-Sunder, Lakshmi and Stewart Meyers, Testing Static Trade-Off Against Pecking Order Models of Capital Structure, Journal of Financial Economics, 1999.
4. Frank, Murray Z., and Vidhan K. Goyal, 2003, Testing the pecking order theory of capital structure, Journal of Financial Economics 67, 217-248.
5. Gomes, A., and G. Phillips, 2007, Why do public firms issue private and public securities? working paper.
6. Leary, Mark and Michael Roberts, "Do Firms Rebalance Their Capital Structures?," *Journal of Finance*, 2005, 60, 2575 - 2619
7. Hennessy, Chris, and Toni Whited, 2005, "Debt Dynamics," *Journal of Finance* 60 (2005): 1129-1165
8. Hennessy, Chris, and Toni Whited, 2006, "How Costly is External Financing? Evidence from a Structural Estimation." forthcoming, *Journal of Finance*.

****
**** **DAY 4 BEGINS HERE** ****
****

Section 3: Mergers and Acquisitions (Day 4 BEGINS HERE)

(survey article) Andrade, Gregor, Mark Mitchell and Erik Stafford. 2001. "New Evidence and Perspectives on Mergers." Journal of Economic Perspectives. May.
* (d4, a1) Jensen, Michael, 1993, "The modern industrial revolution and the challenge to internal control systems," AFA presidential address, *Journal of Finance*. 48, 831-880.

(classic background reading, read if you haven't yet done so) Jensen, M. 1986. "Agency Costs of Free Cash Flow, Corporate Finance and Takeovers." American Economic Review. 76, pp. 323-329.

* (d4, a2) Kaplan and Weisbach, 1992. The Success of Acquisitions: Evidence from Disvestitures, Journal of Finance.

* (d4, a3, write-up choice) Maksimovic,. V. and G. Phillips, 2001, The Market for Corporate Assets: Who Engages in Mergers and Asset Sales and are there Efficiency Gains?, In Adobe PDF Format., ***Journal of Finance, December, 2001, 2019-2065***

(additional extension article) Yang, Liu, 2008, "The Real Determinants of Asset Sales, Journal of Finance.

(additional extension article) Maksimovic, Phillips, Prabhala, 2011, forthcoming Journal of Financial Economics, "Post-Merger Restructuring and the Boundaries of the Firm" **Download here.**

* (d4, a4) Shleifer, A., and R. W. Vishny, 1992, Liquidation values and debt capacity: A market equilibrium approach, *Journal of Finance* 47, 1343-1366.

(background) Schlingemann, F. P., R. M. Stulz, and R. A. Walkling, 2002, Divestitures and the liquidity of the market for corporate assets, *Journal of Financial Economics* 64, 117-144.

(background) Ortiz-Molina and Phillips, 2011, Asset Liquidity and the Cost of Capital, working paper. Available at: http://www.smith.umd.edu/faculty/gphillips/Papers/AssetLiquidity.pdf

* (d4, a5, write-up choice) Phillips, Gordon and Alexei Zhdonov, 2011, "R&D and the Market for Acquisitions" **Download here or E-mail authors for latest version.**

* (d4, a6, write-up choice) Rhodes-Kropf, Matthew, David Robinson, "The Market for Mergers and the Boundary of the Firm." http://www.nber.org/~confer/2004/si2004/cf/rhodeskropf.pdf, Journal of Finance. 2008.
* (d4, a7, write-up choice) Hoberg and Phillips, "Competition and Product Market Synergies in Mergers and Acquisitions,", Published Review of Financial Studies 2010: http://www.smith.umd.edu/faculty/gphillips/Papers/synergies.pdf

**** (addiitional articles on M&A, inefficient M&A, not covered in class)
Shleifer, Andrei and Robert Vishny, "Stock Market Driven Acquisitions". Paper available on SSRN. Journal of Financial Economics.
Rhodes-Kropf, Matthew, and S. Viswanathan, Market Value and Merger Waves," 2003. Journal of Finance Full Text PDF
Rhodes-Kropf, Matthew, David Robinson, and S. Vishwanthan, 2004, "Merger Waves and Merger Activity: The Empirical Evidence." Journal of Financial Economics.
Dong, Ming, David Hirshleifer, Scott Richardson, and Siew Hong Teoh, 2003, "Does Investor Misvaluation Drive the Takeover Market?" http://www.cob.ohio-state.edu/fin/dice/papers/2003/2003-7.pdf, Journal of Finance, 2006.
Sara Moeller, Rene Stulz and Frederick Schlingemann, "Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave," Journal of Finance, 2005 757-782

***** Background articles, additional articles not covered in class
Jensen, M. 1988. "Takeovers: Their Causes and Consequences." Journal of Economic Perspectives. 2, pp. 21-48.
Jarrell, Gregg, James Brickley, and Jeffrey Netter. 1988. "The Market for Corporate Control: The Empirical Evidence Since 1980," Journal of Economic Perspectives, Winter: 49-68.
Kaplan, S. 1989. "The Effects of Management Buyouts on Operations and Value." Journal of Financial Economics. 24, pp. 217-254.
Ravenscraft and F. Scherer, 1987, Competition; Mergers, Sell-offs, and Economic Efficiency.
Jensen M. and Richard Ruback. 1983. "The Market for Corporate Control: The Scientific Evidence," Journal of Financial Economics, 11.
Kaplan, Steve and Bengt Holmstron, 2001, Corporate Governance and Merger Activity in the U.S.: Making Sense of the 1980s and 1990s
Jovanovic, Boyan and Rousseau, 2002, The Q-Theory of Mergers, American Economic Review

<u>Section 4: The Theory of the Firm: Conglomerate Firms, Theory and Tests</u>

Part 1: (DAY 5) Conglomerates and the Theory of the Firm

*** survey by Maksimovic and Phillips: Conglomerate Firms and Internal Capital Markets, Handbook of Empirical Finance, editor: Espen Eckbo.
*(d5, a1) Williamson, Oliver, Chapter 2: Internal Firm Organization and limits to Firm Size, In: Oliver Williamson, <u>Corporate Control and Business Behavior</u>, also: Chapter 7: The Multidivisional Form Innovation, & Chapter 9: Applications of the Multidivision Form Hypothesis.
*(d5, a2)Lang, Larry, and Rene Stulz, 1994, Tobin's q, Corporate Diversification, and Firm Performance, *Journal of Political Economy*. v102 n6 December 1994, pp. 1248-80.
Berger, Philip G. and Eli Ofek, 1995, Diversification's effect on firm value, *Journal of Financial Economics*, 39-65.
*(d5, a3) Shin, H. and Rene Stulz, 1997, Are Internal Capital Markets Efficient, *Quarterly Journal of Economics*.
*(d5, a4) Lamont, Owen, 1997, Cash Flow and Investment: Evidence from Internal Capital Markets, *Journal of Finance*
David S. and Jeremy Stein, 1997, The Dark Side of Internal Capital Markets: Divisional Rent Seeking and Inefficient Investments, mimeo, MIT.
Scharfstein, David S., 1997, The Dark Side of Internal Capital Markets II, mimeo, MIT.
Rajan, Raghuram G., Henri Servaes and Luigi Zingales, 2000, The Cost of Diversity: The Diversification Discount and Inefficient Investment, JF.
Khanna, Naveen and Tice, Sheri, 2001, "The Bright Side of Diversification", Journal of Finance, 2001.
Graham, J., M. Lemmon and J. Wolf, 2002, "Does Corporate Diversification Destroy Value?" Journal of Finance 57, 695-720
Schoar, Antoinette, *The Effect of Diversification on Firm Productivity*, <u>The Journal of Finance</u>, December 2002, Vol. 62 (6), 2379-2403.
Campello, M., 2002, <u>Internal Capital Markets in Financial Conglomerates: Evidence from Small Bank Responses to Monetary Policy</u> , *Journal of Finance* 57 (6), pp. 2773-2805.
*(d5, a5, write-up choice) Whited, Toni, 2001, ""Is It Inefficient Investment that Causes the Diversification Discount? Journal of Finance.

You may also want to look at the following working papers recently presented at NBER 1999 summer institutue. Link to NBER working papers, Summer 1999, three papers on conglomerates and resource allocation, (1. Judy Chevalier, 2. Jose Campa and Simi Kedia, and Lamont and Polk) see: <u>http://nber.nber.org/~confer/99/si99/cfprg.htm</u> (papers 2 and 3 were published in JF and JFE respectively.) You might want to compare early working papers with final published papers.

Inderst, and H. Meuller, 2003, "Internal vs. External Financing: An Optimal Contracting Approach," Journal of Finance.
Villalonga, B., 2004, "Diversification Discount or Premium? New Evidence from the Business Information Tracing Series", *Journal of Finance* 59, 479 – 506.
(d5, a6, write-up choice) Campa and Kedia, 2002, Explaining the Diversification Discount, *Journal of Finance*, papers and proceedings.
Villalonga, B., 2004, "Does Diversification Cause the Diversification Discount", *Financial Management* 33, 5-23
Dimitrov, Valentin and Sheri Tice, 2006, "Corporate Diversification and Credit Constraints: Real Effects Across the Business Cycle", Review of Financial Studies, Vol 19, Issue 4, pp. 1465-1498.
Santalo, Juan and Manuel Becerra, 2007, <u>Competition from Specialized Firms and the Diversification-Performance Linkage</u>, Journal of Finance.
*(d5, a7, write-up choice) Maksimovic,. V. and G. Phillips, 2002, Journal of Finance, Do Conglomerate Firms Allocate Resources Inefficiently? Theory and Evidence," <u>In Adobe PDF Format.</u> ***Journal of Finance, April, 2002, 721-767***
*(d5, covered if time available) Boutin, Xavier et. al., 2010, "Deep-Pocket Effect of Internal Capital Markets" download at: <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1469455</u>

* (Monday's Finance seminar)

Hoberg, Gerard and Gordon Phillips, 2011, "Conglomerate Industry Spanning" covered in Monday's finance seminar.

Some Useful Econometric Methods: (Not covered but may be of interest)

i. **Intra-Industry Empirical Methods and Econometric Methods**

Bresnahan, T., "Empirical Studies of Industries with Market Power," Handbook of Industrial Organization, North Holland, 1989.
Berry, Steve, Yale., Airel Pakes, Harvard. More sophisticated empirical tests of dynamic industrial organization.

ii. **Panel Data**

Hsiao, C. Analysis of Panel Data. Cambridge University Press, 1986.
Blundell, Richard, Stephen Bond, and Costas Meghir, 1995, "Econometric Models of Company Investment, In: Handbook of Panel Data.
Chamberlain, G., "Multivariate Regression Models for Panel Data," Journal of Econometrics. 1982, vol. 18, pp. 4-46.
Chamberlain, G., "Panel Data," Handbook of Econometrics. Volume I, Chapter 22.
Maddala, G.S. "The Use of Variance Component Models in Pooling Cross Section and Times Series Data," Econometrica. 1971, pp. 341-358.
Mundlak, Y. "Empirical Production Function Free of Management Bias," Journal of Farm Economics. 1961, pp. 45-56.

iii. **Simultaneous and Nonlinear Equations**

Amemiya, T., "Nonlinear Regression Models," Handbook of Econometrics. Z. Grilliches and M.D. Intrilligator (eds.), Vol. I, pp. 333-389.

iv. **Qualitative Response and Limited Dependent Variables**

Maddala, G. Limited Dependent and Qualitative Variables in Econometrics. Cambridge University Press, 1982.
McFadden, D., "Econometric Analysis of Qualitative Response Models," Handbook of Econometrics. vol 2, Chapter 24.

Location

Humboldt-Universität zu Berlin

Max. number of participants

The number of participants is limited to 10.

Cost

The course fee amounts to EUR 500.

Credits

The course is eligible for 6 ECTS.
The course grade will be based on handin "referee reports", participation in class (with some presentations possible) total 50%, and a take-home final exam (50%).