

Alon P. Brav



Duke University
The Fuqua School of Business
100 Fuqua Drive
Box 90120
Durham, NC 27708-0120

Phone: (919) 660-2908
Fax: (919) 684-2818
Email: brav@duke.edu
Web: www.duke.edu/~brav/

Educational Background

Master of Arts, Department of Psychology and Neuroscience, concentration in Cognitive Neuroscience, Duke University, 2008-2010. Thesis committee: Scott Huettel (chair), Michael Platt, Alexander Rosenberg.

Ph.D. in Finance, Graduate School of Business, University of Chicago, 1993-1998. Dissertation committee: Eugene Fama (chair), George Constantinides, Richard Thaler, Mark Mitchell, Nicholas Polson.

Department of Industrial Engineering and Management, Technion-Israel Institute of Technology, Haifa, Israel, 1990-1992.

B.A. in Economics (Cum Laude), Area of Business Administration, University of Haifa, Haifa, Israel, 1987-1990.

Academic Appointments

Robert L. Dickens Professor of Business Administration, Fuqua School of Business, Duke University, July 2014 - present.

Professor of Finance, Fuqua School of Business, Duke University, 2008 - present.

Associate professor of Finance with tenure, Fuqua School of Business, Duke University, 2003 - 2008.

Associate professor of Finance, Fuqua School of Business, Duke University, 2001 - 2003.

Assistant professor of Finance, Fuqua School of Business, Duke University, 1997 - 2001.

Other Academic Affiliations

Research member European Corporate Governance Institute (ECGI), February 2017 - present.

Senior Fellow, Harvard Law School Program on Corporate Governance, June 2014 - present.

Faculty Research Associate, National Bureau of Economic Research (NBER), Corporate Finance Program, 2008 - present.

Associate editor, Journal of Finance, 2006 - present.

Associate editor, Review of Finance, 2010 -2013.

Visiting associate professor, Graduate School of Business, University of Chicago, 2005 - 2006.

Research associate, Department of Philosophy, Duke University, 2001 - 2006.

Teaching Experience

FINANCE 652G – Global Capital Markets, Duke University.

FINANCE 658, Corporate Restructuring, Duke University.

FINANCE II – Doctoral Seminar: PhD Empirical Corporate Finance, Duke University (co-taught with John R. Graham).

FINANCE 645 – Global Financial Management, Duke University.

FINANCE 352 – Investments, Duke University.

491G, Global Executive MBA, – Special Topics (Market Efficiency), Duke University.

- 1998, Awarded the "*Outstanding Teaching and Dedication to Students*" by the Students.
- 1999, Runner-up, Daimler Chrysler Teaching Award for outstanding teaching in the core.
- 2000, Runner-up, Teaching award for outstanding teaching in the Weekend Executive MBA Program.
- 2001, Runner-up, Daimler Chrysler Teaching Award for outstanding teaching in the core.
- 2002, Excellence in Teaching award in the Weekend Executive MBA Program.
- 2004, Excellence in Teaching award in the Weekend Executive MBA Program.
- 2005, Honorable Mention, for teaching in the core.
- 2005, Excellence in Teaching award in the Weekend Executive MBA Program.
- 2010, Runner-up, Daimler Chrysler Teaching Award for outstanding teaching in the core.

Awards and Grants

- 1987-1990: University of Haifa – three annual scholarships.
- 1990-1992: Technion-Israel Institute of Technology – Graduate Fellowships.
- 1993: Center for Research in Security Prices Research Award.
- 1993-1995: Graduate School of Business, University of Chicago – three annual graduate fellowships.

- 1996: The Oscar Mayer fellowship.
- 1998: Smith Breeden Distinguished Paper Prize for the best paper published in the *Journal of Finance*.
- 2003: Barclays Global Investors Michael Brennan Award for the best paper published at the *Review of Financial studies*.
- 2004: CIBER International Research Grant, Duke University.
- 2005: Hartman Center for the Study of Medium-Sized Enterprises Grant.
- 2005: CIBER International Research Grant, Duke University.
- 2006: Jensen Prize for the best corporate finance paper published in the *Journal of Financial Economics*.
- 2006: CIBER International Research Grant, Columbia University.
- 2006-2007: Federal Deposit Insurance Corporation (FDIC) Financial Research Grant.
- 2006-2007: Q-Group Research Grant.
- 2007: Grant by the Millstein Center for Corporate Governance and Performance, Yale School of Management.
- 2007: The Institute for Quantitative Investment Research (INQUIRE UK) Annual Best Paper Prize.
- 2007: Chicago Quantitative Alliance (CQA) Annual Academic Competition, Second Prize.
- 2007: Roger F. Murray Prize (2nd Place), The Institute for Quantitative Research in Finance.
- 2010: Runner-up, Deutsche Bank Best Paper Prize at the *Review of Finance*.
- 2015: Best Paper Award, FMA Consortium on Activist Investors, Corporate Governance and Hedge Funds.
- 2016: Barclays Global Investors Michael Brennan Award for the best paper published at the *Review of Financial studies*.
- 2016: Winner of the Best Paper Award at the 2016 Corporate Governance Symposium hosted by the John L. Weinberg Center for Corporate Governance at the University of Delaware.

Published Papers

- “Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Non-Venture-Backed Companies,” with Paul Gompers, *Journal of Finance* 52, no.5, December 1997.
 - Awarded the Smith Breeden Distinguished Paper in 1998 for the best paper published in the *Journal of Finance* .
 - Reprint in *Venture Capital*, ed. Mike Wright, Harry J. Sapienza and Lowell W. Busenitz.

- Reprint in *Empirical corporate finance* Volume 1, ed. Michael J. Brennan, Edward Elgar Publishing.
- “Is the Abnormal Return Following Equity Issuances Anomalous?,” with Chris Geczy and Paul Gompers, *Journal of Financial Economics* 56, 2000.
- “Inference in Long-Horizon Event Studies: A Bayesian Approach with Application to Initial Public Offerings,” *Journal of Finance* 55, no.5, 2000.
- “Competing Theories of Financial Anomalies,” with J.B. Heaton, *Review of Financial Studies* 15 no. 2, 2002.
 - Awarded the Barclays Global Investors (BGI) Michael Brennan Award in 2003 for the best paper published in the *Review of Financial Studies*.
 - Reprint in *The Psychology of World Equity Markets* - ed. by Werner De Bondt. Edward Elgar Publishing Ltd.
- “The Role of Lock-ups in Initial Public Offerings,” with Paul Gompers, *Review of Financial Studies* 16 no.1, 2003. (Lead Article).
- “Asset Pricing with Heterogeneous Consumers: Empirical Evidence,” with George Constantinides and Chris Geczy, *Journal of Political Economy* 110 no. 4, 2002.
 - Reprint in *Financial Markets and the Real Economy* - ed. John H. Cochrane. Edward Elgar Publishing Ltd.
- “An Empirical Analysis of Analysts’ Target Prices: Short Term Informativeness and Long Term Dynamics,” with Roby Lehavy, *Journal of Finance* 58 no. 5, 2003.
 - Nominated for the 2003 Smith-Breeden Prize.
- “Market Indeterminacy,” with J.B. Heaton, *The Journal of Corporation Law* 28(4), 2003.
- “The Rational-Behavioral Debate in Financial Economics,” with J.B. Heaton and Alexander Rosenberg, *Journal of Economic Methodology* 11(4) 2004. (Lead Article).
 - Reprint in the ICFAI *Journal of Behavioral Finance* 1 (3) 2004.
- “Payout policy in the 21st century,” with John R. Graham, Campbell R. Harvey, and Roni Michaely, *Journal of Financial Economics* 77(3), September 2005. (Lead article).

- Jensen Prize for the best corporate finance paper published in the *Journal of Financial Economics*.
 - The data used in the payout survey can be downloaded [here](#).
- “Using Expectations to Test Asset Pricing Models,” with Reuven Lehavy and Roni Michaely, *Financial Management* 34(3), Autumn 2005.
 - “The long-term expectations used in this paper can be downloaded [here](#).”
 - “Managerial Response to the May 2003 Dividend Tax Cut,” with John Graham, Campbell Harvey, and Roni Michaely, *Financial Management*, 37(4) Winter 2008. (Lead Article)
 - “The Effect of the May 2003 Dividend Tax Cut on Corporate Dividend Policy: Empirical and Survey Evidence,” with John Graham, Campbell Harvey, and Roni Michaely, *National Tax Journal*, September 2008.
 - “Hedge Fund Activism, Corporate Governance, and Firm Performance,” with Wei Jiang, Frank Partnoy, and Randall Thomas, *Journal of Finance* 63(4), August 2008.
 - Finalist for the 2008 Brattle Award.
 - Reprint in *Foundations of Corporate Law*, 2nd edition, Roberta Romano, 2010.
 - Reprint in *Institutional Investor Activism: Hedge Funds and Private Equity, Economics and Regulation*, William W. Bratton and Joseph A. McCahery (eds.), 2015.
 - “Evidence on the Tradeoff between Risk and Return for IPO and SEO Firms,” with Roni Michaely, Michael Roberts, and Rebecca Zarutskie, *Financial Management* 38(2), 2009. (Lead Article).
 - “Returns to Hedge Fund Activism,” with Wei Jiang, Frank Partnoy, and Randall Thomas, *Financial Analysts Journal* 64(6), November/December 2008.
 - “The Idiosyncratic Volatility Puzzle: Time Trend or Speculative Episodes?,” with Michael W. Brandt, John R. Graham, and Alok Kumar, *Review of Financial Studies* 23(2), 2010.
 - “Activist Arbitrage: A Study of Open-Ending Attempts of Closed-End Funds,” with Michael Bradley, Itay Goldstein, and Wei Jiang, *Journal of Financial Economics* 95(1), 2010. (Lead Article)

- Reprint in *Mergers and Acquisitions*, edited by Harold Mulherin, Terry College of Business, University of Georgia, USA.
 - The data used in the paper can be downloaded [here](#).
- “The Limits of the Limits of Arbitrage,” with J.B. Heaton and Si Li, *Review of Finance* 14, 2010.
 - Runner-up for the 2010 Deutsche Bank Best Paper Prize at the *Review of Finance*.
 - “Hedge Fund Activism: A Review,” with Wei Jiang and Hyunseob Kim, *Foundations and Trends in Finance* 4(3), 2010.
 - “Empty Voting and the Efficiency of Corporate Governance,” with Richmond D. Mathews, *Journal of Financial Economics* 99(2), 2011.
 - “Hedge Fund Activism,” with Wei Jiang and Hyunseob Kim, Chapter 7 in *Research Handbook on Hedge Funds, Private Equity and Alternative Investments*, Edited by Phoebus Athanassiou, 2012.
 - “Pre-Disclosure Accumulations by Activist Investors: Evidence and Policy,” with Lucian Bebchuk, Robert Jackson and Wei Jiang, *Journal of Corporation Law*, 39, Fall 2013.
 - “The Long-Term Effects of Hedge Fund Activism,” with Lucian Bebchuk and Wei Jiang. *Columbia Law Review*, 115(5), June 2015. (Lead Article)
 - “Recent Advances in Research on Hedge Fund Activism: Value Creation and Identification,” with Wei Jiang and Hyunseob Kim. *Annual Review of Financial Economics*, Volume 7, 2015.
 - “The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes,” with Wei Jiang and Hyunseob Kim. *Review of Financial Studies*, 28(10), 2015. (Lead Article)
 - Awarded the Barclays Global Investors (BGI) Michael Brennan Award in 2015 for the best paper published in the *Review of Financial Studies*.
 - “Event Studies in Securities Litigation: Low Power, Confounding Effects, and Bias,” with J.B. Heaton. *Washington University Law Review*, 93(2), 2015.

- “How Does Hedge Fund Activism Reshape Corporate Innovation?,” with Wei Jiang, Song Ma, and Xuan Tian, 2017, forthcoming *Journal of Financial Economics*.
 - Winner of the Best Paper Award at the 2016 Corporate Governance Symposium hosted by the John L. Weinberg Center for Corporate Governance at the University of Delaware.

Non-Academic Articles

- “The real questions about market efficiency,” with J.B. Heaton, *Financial Times*, August 27th 2003.

Working Papers

- “Anti-Activist Legislation: The Curious Case of the Brokaw Act,” with J.B. Heaton and Jonathan Zandberg.
- “Wolf Pack Activism,” with Amil Dasgupta and Richmond Mathews.
- “Dancing with Activists,” with Lucian Bebchuk, Wei Jiang, and Thomas Keusch.
 - Winner best paper award from the FMA Consortium on Activist Investors, Corporate Governance and Hedge Funds held in December 2015.
- “Picking Friends before Picking (Proxy) Fights: How Mutual Fund Voting Shapes Proxy Contests” with Wei Jiang and Tao Li.
- “The Choice of Listing on and Delisting from a Stock Exchange,” 2006, with Omer Brav and Wei Jiang.
- “Did ERISA’s prudent man rule change the pricing of dividend omitting firms?,” 1998, with J.B. Heaton.
- “Explaining the Underperformance of Initial Public Offerings: A Cumulative Prospect Theory Approach?,” 1996, with J.B. Heaton.

Professional Service

- Member of the program committee for the 2018 Annual meetings of the Western Finance Association.
- Member of the program committee for the 2018 Annual Utah Winter Finance Conference.

- Member of the program committee of the 44th Annual Meeting of the European Finance Association.
- Member of the program committee for the 2017 Tel Aviv Finance Conference.
- Member of the 14th Annual Conference in Financial Economics Research by Eagle Labs held at IDC Herzliya.
- Member of the program committee for the young scholars finance consortium, 2016 and 2018.
- Member of the program committee of the 43rd Annual Meeting of the European Finance Association.
- Member of the 13th Annual Conference in Financial Economics Research by Eagle Labs held at IDC Herzliya.
- Member of the program committee for the 2017 UNC-Duke Corporate Finance Conference.
- Member of the program committee for the 2017 Annual meetings of the Western Finance Association.
- Member of the program committee for the 2017 Annual Utah Winter Finance Conference.
- Member of the program Committee for the Eleventh Annual Conference on Empirical Legal Studies.
- Member of the program committee for the 2016 Tel Aviv Finance Conference.
- Member of the program committee for the 2016 Edinburgh Corporate Finance Conference.
- Member of the program committee for the 2016 Interdisciplinary Center in Herzliya, Israel, Annual Academic Conference.
- Member of the program committee for the 2016 Annual meetings of the Western Finance Association.
- Member of the program committee for the 2016 Annual Utah Winter Finance Conference.
- Member of the program committee for the 2016 Midwest Finance Association Annual Meeting.
- Member of the program committee for the 2015 Tel Aviv Finance Conference.
- Member of the European Finance Association 2015 program committee.
- Member of the program committee for the 2015 Edinburgh Corporate Finance Conference.
- Member of the program committee for the 2015 Interdisciplinary Center in Herzliya, Israel, Annual Academic Conference.
- Member of the program committee for the 2015 Annual meetings of the Western Finance Association.
- Member of the program committee for the 2015 Annual Utah Winter Finance Conference.
- Member of the program committee for the 2014 Tel Aviv Finance Conference.

- Member of the European Finance Association 2014 program committee.
- Member of the program committee for the 2014 Edinburgh Corporate Finance Conference.
- Member of the program committee for the 2014 Annual Utah Winter Finance Conference.
- Member of the program committee for the 2014 Interdisciplinary Center in Herzlyia, Israel, Annual Academic Conference.
- Member of the program committee for the 2013 Tel Aviv Finance Conference.
- Member of the program committee for the 2013 Sustainable Investment Research Initiative: Sustainability & Finance Symposium.
- Member of the Program Committee for the 2013 European Finance Association Meeting.
- Member of the 2013 Interdisciplinary Center (Herzlyia, Israel) Conference Program Committee.
- Member of the program committee for the 2013 Annual Utah Winter Finance Conference.
- Member of the program committee for the 2013 Annual meetings of the Western Finance Association.
- Member of the program committee for the 2012 Tel Aviv Finance Conference.
- Member of the 2012 Interdisciplinary Center (Herzlyia, Israel) Conference Program Committee.
- Member of the program committee for the 2012 Annual Utah Winter Finance Conference.
- Member of the program committee for the 2011 Tel Aviv Finance Conference.
- Member of the program committee for the 2011 Annual meetings of the Western Finance Association.
- Member of the 2011 Interdisciplinary Center (Herzlyia, Israel) Conference Program Committee.
- Member of the program committee for the 2011 Annual Utah Winter Finance Conference.
- Member of the program committee for the 2010 Tel Aviv Finance Conference.
- Member of the 2010 Interdisciplinary Center (Herzlyia, Israel) Conference Program Committee.
- Member of the program committee for the 2010 Annual meetings of the Western Finance Association.
- Member of the program committee for the 2010 Annual Utah Winter Finance Conference.
- Member of the 2009 Interdisciplinary Center (Herzlyia, Israel) Conference Program Committee.
- Member of the program committee for the 2009 Annual Utah Winter Finance Conference.
- Member of the program committee for the 2008 Annual Utah Winter Finance Conference.
- Member of the 2008 Interdisciplinary Center (Herzlyia, Israel) Conference Program Committee.
- Program co-chair - 2007 Annual meetings of the Western Finance Association.

- Member of the program committee for the 2007 meeting of the American Finance Association.
- Member of the 2006 Interdisciplinary Center (Herzliya, Israel) Conference Program Committee.
- Member of the 2006 FMA Program Committee.
- Member of the program committee for the 2005 meeting of the American Finance Association.
- Member of the 2005 FMA Program Committee.
- Member of the 2004 FMA Program Committee.
- Member of the 2002 Nominating Committee of the American Finance Association.
- Member of the Corporate Finance – Empirical Track of the 1999 FMA European Meeting Program Committee.
- Ph.D. dissertation committee member for Song Ma (Yale, 2015), Heqing Zhu (University of Oklahoma, 2014), Ben Ee (McKinsey, 2013), Hyunseob Kim (Cornell University, 2012), Ryan Pratt (Brigham Young University, 2012), Sam Melessa (University of Iowa, 2012), Paul Borochin (University of Connecticut, 2011), Jules van Binsbergen (Stanford University, 2008), Mark Leary (Cornell University, 2007), Nataliya Khmilevska (Lehman Brothers, 2007), Lin Bai (University of Cincinnati law school, 2007), Julia Wu (Barclay's Global, 2006), Si Li (Wilfred Laurier, 2005), Tao Lin (Hong Kong University, 2003), Emma Rasiel (Duke University, 2003), Andrew Roper (Wisconsin, 2002), and Arman Glodjo.
- Referee for: Journal of Finance, Journal of Financial Economics, The Review of Financial Studies, Journal of Political Economy, European Finance Review, Journal of Empirical Finance, Journal of Economics and Finance, Journal of Business, Journal of Business Finance and Accounting, Journal of Accounting and Economics, Journal of Banking and Finance, The Review of Economics and Statistics, Financial Management, Journal of Financial Markets, Financial Services Review, The Review of Financial Economics, Quantitative Finance, European Journal of Operational Research, Statistica Sinica, Management Science, Journal of Financial Research, Journal of Financial and Quantitative Analysis, Contemporary Accounting Research, European Economic Review, Journal of International Money and Finance, Financial Analysts Journal, Critical Finance Review.

Presentations

- *“Picking Friends before Picking (Proxy) Fights: How Mutual Fund Voting Shapes Proxy Contests”*
Presented at IDC Herzliya.
- *“How Does Hedge Fund Activism Reshape Corporate Innovation?”* (previously titled *“Shareholder Power and Corporate Innovation: Evidence from Hedge Fund Activism”*)

Presented at Arizona State University, Berkeley Law School, SEC, Georgia State University, University of Melbourne, London Business School, UNSW Business School, Wharton, University of South Australia Business School, University of Sydney, University of Queensland, University of Pittsburgh, University of Virginia, University of Luxembourg, Frankfurt School of Finance and Management, Fordham University, George Washington University, Hebrew University, New York University Law School, Purdue, Rice University, University of Southern California, University of Sydney, University of Queensland, University of Melbourne, University of South Australia, University of New South Wales, Washington University in St. Louis, Yeshiva University, Northwestern University, Tel Aviv University, Ackerman Chair Corporate Governance Conference held at Bar-Ilan University, The 7th Summer Finance Conference, Arison School of Business, IDC Herzliya, Israel, The BI Conference on Corporate Governance, held at Norwegian Business School, the conference “Bridging the Gap: Academics and Practitioners Debate Current Issues in Governance” held at London Business School, the conference “The Future of Research on Hedge Fund Activism” held at University of San Diego School of Law, the conference organized by the Center for Corporate Finance Conference at NHH, in Bergen, Norway, and the 2016 Corporate Governance Symposium held at the University of Delaware, Lerner College of Business & Economics.

- *“The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes”*

Presented at Bar-Ilan University, Boston College, Brigham Young University, Cornell University, Duke University, Drexel University, Goethe University Frankfurt, HEC Paris, Imperial College, Interdisciplinary Center, Herzlyia, Israel, London Business School, New York University, Oxford University, Rotterdam School of Management, Southern Methodist University, Tel Aviv University, University of Alabama, University of Amsterdam, University of Illinois at Urbana-Champaign, University of Lausanne, University of Mannheim, University of Oregon, University of Washington, the Harvard Business School Information, Markets, & Organization Conference, the AIM Investment Center Conference on Institutional Investment, and the 6th Jackson Hole Finance Conference.

- *“Hedge Fund Activism, Corporate Governance, and Firm Performance”*

Presented at Arizona State University, Interdisciplinary Center, Herzlyia, Israel, Duke University, BNP Paribas Hedge Fund Center Symposium on Shareholder Activism by Hedge Funds, The Conference Board, Hong Kong University of Science and Technology, London Business School, Nanyang Technological University, National University of Singapore, Q-group, Singapore Management University, Society of Quantitative Analysts, U.S. Securities and Exchange Commission, University of Texas at Austin, and Washington University in St. Louis.

- *“The Limits of the Limits of Arbitrage”*

Presented at Hebrew University, Northwestern University, Duke University, Vanderbilt University, and Interdisciplinary Center, Herzlyia, Israel.

- *“Costly Communication, Shareholder Activism, and Limits to Arbitrage: Evidence from Closed-End Funds”*

Presented at Emory University, Tel-Aviv University, Northwestern University, and University of Minnesota.

- *“Using Expectations to Test Asset Pricing Models*, (previously titled Expected Returns and Asset Pricing”)
Presented at the Interdisciplinary Center Herzlyia, Israel, Duke University, Goldman Sachs Asset Management, Harvard Business School, Haifa University, University of British Columbia, University of Washington, Seattle, Vanderbilt University, Tel-Aviv University, Texas Christian University, Tuck School of Business at Dartmouth, Tulane University, University of Chicago, University of Colorado at Boulder, University of Rochester, University of Wisconsin, Madison and New York University, the 2003 Utah Winter Finance Conference.
- *“An Empirical Analysis of Analysts’ Target Prices: Short Term Informativeness and Long Term Dynamics”*
Presented at University of Illinois-Champaign, University of North Carolina at Chapel Hill, University of Toronto, and Purdue University.
- *“Competing Theories of Financial Anomalies”*
Presented at Wharton, M.I.T., Rice University, The Jerusalem Financial Systems and Institutions conference held at the Hebrew University, the conference on market frictions and behavioral finance held at Kellogg, Northwestern University, Tel-Aviv University, University of North Carolina at Chapel Hill, Duke, University of Michigan, Michigan State, Harvard Business School, The Eleventh Annual Utah Winter Finance Conference.
- *“The Role of Lock-ups in Initial Public Offerings”*
Presented at Cornell University and the conference on market abuse and insider trading held at Bocconi University.
- *“Is the Abnormal Return Following Equity Issuances Anomalous?”*
Presented at the Second Red Sea Conference, June 1999, and Cornell University, August 1999.
- *“Inference in Long-Horizon Event Studies: A Bayesian Approach with Application to Initial Public Offerings”*
Presented at Tel-Aviv University, August 1998, AFA meetings, January 1999, Virginia Tech, September 1999, NotreDame, September 1999.
- *“Myth or Reality? The Long-Run Underperformance of Initial Public Offerings, Evidence from Venture and Non-Venture-Backed Companies”*
Presented Tel-Aviv University, August 1996.
- *“The Long-Run Underperformance of Seasoned Equity Offerings Revisited”*
Presented at the University of Chicago, Finance Workshop, Fall 1994.

- *“Backing Out the Consumption of Asset-Holders: Data Considerations”*
Presented at the University of Chicago, Workshop in Economics and Econometrics, Spring 1994.
- *“Aggregate Consumption, Heterogeneity and the Equity Premium”*
Presented at the University of Chicago, Workshop in Economics and Econometrics, Fall 1993.