

Syllabus: Theoretical and Empirical Perspectives on Entrepreneurship

Winter 2010

**Thursdays 2:30-5:30
Cumnock 220
Harvard Business School**

Copies of all readings will be distributed every other week. Readings for the first class will be available from Theresa Gaignard in Rock Center, 3rd Floor (Harvard Business School) one week before the first class (starting on Thursday, January 21st).

Three referee reports will be due over the course of the semester. These are indicated in bold italics. In addition, there will be a final paper proposal, which can build off work you are doing for another class or your thesis.

Josh Lerner and Bill Kerr will teach all sessions with the exception of Session #10 that is taught by Ramana Nanda.

Introduction

Class 1: Kerr (January 28, 2010)

Course Introduction and the “Classics of entrepreneurship”

Kirzner, Israel M., 1979, *Perception, Opportunity, and Profit; Studies in the Theory of Entrepreneurship*, Chicago: University of Chicago Press. Read: pp 154-81; skim 37-75, 107-19.

Kirzner, Israel M., 1972, *Competition and Entrepreneurship*, Chicago: University of Chicago Press. Read: pp 125-34 (after you read Schumpeter)

Knight, Frank, 1921, *Risk, Uncertainty, and Profit*, Boston: Houghton Mifflin, 1921. Read: Part III, chapter 9 and chapter 10. Skim chapter 7.

Schumpeter, Joseph A., 1988, *Essays in Entrepreneurs, Innovations, Business Cycles, and the Evolution of Capitalism* (R. Clemence, editor), Piscataway, New Jersey: Transaction Publishers. Read: pp 253-71

Schumpeter, J. A., 1942, *Capitalism, Socialism, and Democracy*, New York: Harper Brothers. Read: pp 72-106

Module I: The Sources of Entrepreneurship

Class 2: Lerner (February 4)

The sources of entrepreneurs: theory

Aghion, Philippe, and Jean Tirole, 1994, On the management of innovation, *Quarterly Journal of Economics* 109, 1185–207.

Anton, James J., and Dennis A. Yao, 1995, Start-ups, spin-offs, and internal projects, *Journal of Law, Economics and Organization* 11, 362-78.

Hellmann, Thomas, and Enrico Perotti, 2007, The circulation of ideas in firms and markets, Unpublished working paper, Universities of British Columbia and Amsterdam.

The sources of entrepreneurs: empirics

Bhide, Amar, 2000, *The Origin and Evolution of New Business*, New York: Oxford University Press. Selected readings in packet.

Gompers, Paul, Josh Lerner, and David Scharfstein, 2005, Entrepreneurial spawning, *Journal of Finance* 60, 577-614.

Kaplan, Steven, Berk Sensoy, and Per Stromberg, 2009, What are firms? Evolution from birth to public companies, *Journal of Finance* 64:1, 75-115.

Class 3: Lerner (February 11)

Behavioral entrepreneurship

Bernardo, Antonio, and Ivo Welch, 2001, On the evolution of overconfidence and entrepreneurship, *Journal of Economics and Management Strategy* 10, 301-30.

Camerer, Colin F., and Dan Lovallo, 1999, Overconfidence and excess entry: An experimental approach, *American Economic Review* 89, 306-18.

Hamilton, Barton H., 2000, Does entrepreneurship pay? An empirical analysis of the returns to self-employment, *Journal of Political Economy* 108:3, 604-31.

Landier, Augustin, and David Thesmar, 2009, Contracting with optimistic entrepreneurs: Theory and evidence, *Review of Financial Studies* 22, 117-50.

Moskowitz, Tobias J., and Annette Vissing-Jorgensen, 2002, The returns to entrepreneurial investment: A private equity premium puzzle? *American Economic Review* 92, 745-78.

Peer effects and entrepreneurship

Giannetti, Mariassunta, and Andrei Simonov, 2007, Social interactions and entrepreneurial activity, Unpublished working paper, Stockholm School of Economics.

Lerner, Josh and Ulrike Malmendier, 2007, With a little help from my (random) friends: Success and failure in post-business school entrepreneurship, Unpublished working paper, Harvard University.

Nanda, Ramana, and Jesper Sorensen, 2009, Workplace peers and entrepreneurship, Unpublished working paper, Harvard University and Stanford University.

Class 4: Kerr (February 18)

Entrepreneurial labor markets: theory

Gromb, Denis, and David Scharfstein, 2002, Entrepreneurship in equilibrium. Working Paper no. 9001, National Bureau of Economic Research.

Khilstrom, R., and Jean-Jacques Laffont, 1979, A general equilibrium entrepreneurial theory of firm formation based on risk aversion, *Journal of Political Economy* 87, 719-48.

Lazear, Edward P., 2005, Entrepreneurship, *Journal of Labor Economics* 23, 649-80.

Saxenian, Annalee, 1994, *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*, Cambridge: Harvard University Press. Selected readings in packet.

Entrepreneurial labor markets: empirics

Evans, David S., and Linda S. Leighton, 1989, Some empirical aspects of entrepreneurship, *American Economic Review* 79, 519-35.

Fairlie, Robert W., 1999, The absence of the African-American owned businesses: An analysis of the dynamics of self employment, *Journal of Labor Economics* 17, 80-108.

Fallick, Bruce, Charles A. Fleischman, and James B. Rebitzer, 2006, Job-hopping in Silicon Valley: Some evidence concerning the microfoundations of a high-technology cluster, *Review of Economics and Statistics* 88:3, 472-81.

Holmes, Thomas J., and James A. Schmitz, Jr., 1995, On the turnover of business firms and business managers, *Journal of Political Economy* 103, 1005-38.

Hunt, Jennifer, 2009, Which immigrants are most innovative and entrepreneurial? Distinctions by entry visa, Working paper no. 14920, National Bureau of Economic Research. **[REFEREE REPORT #1]**

Class 5: Kerr (February 25)

Local industrial characteristics, agglomeration, and entrepreneurship: theory

Chinitz, Benjamin, 1961, Contrasts in agglomeration: New York and Pittsburgh, *American Economic Review* 51:2, 279-89.

Florida, Richard, 2005, *Cities and the Creative Class*, New York: Routledge. Selected readings in packet.

Jacobs, Jane, 1970, *The Economy of Cities*, New York: Vintage Books. Selected readings in packet.

Marshall, Alfred, 1920, *Principles of Economics*, London: MacMillan and Co. Selected readings in packet.

Glaeser, Edward, William Kerr, and Giacomo Ponzetto, 2010, Clusters of entrepreneurship, *Journal of Urban Economics* 67, 46-60.

Local industrial characteristics, agglomeration, and entrepreneurship: evidence

Dumais, Guy, Glenn Ellison, and Edward Glaeser, 2002, Geographic concentration as a dynamic process, *Review of Economics and Statistics* 84, 193-204.

Glaeser, Edward, and William Kerr, 2009, Local industrial conditions and entrepreneurship: How much of the spatial distribution can we explain?, *Journal of Economics and Management Strategy* 18, 623-63.

Michelacci, Claudio, and Olmo Silva, 2007, Why so many local entrepreneurs?, *Review of Economics and Statistics* 89:4, 615-33.

Zucker, Lynne G., Michael R. Darby, and Marilynn B. Brewer, 1998, Intellectual human capital and the birth of U.S. biotechnology enterprises, *American Economic Review* 88, 290-306.

Module II. Entrepreneurship and firm dynamics

Class 6: Kerr (March 4)

Entrepreneurship and industry evolution: theory

Cabral, Luis M.B., and Jose Mata, 2003, On the evolution of firm size distribution: Facts and theory, *American Economic Review* 93, 1075-90.

Hopenhayn, Hugo, 1992, Entry, exit and firm dynamics in long run equilibrium, *Econometrica* 60:5, 1127-50.

Jovanovic, Boyan, 1982, Selection and the evolution of industry, *Econometrica* 50, 649-70.

Jovanovic, Boyan, and Glenn M. McDonald, 1994, The life cycle of a competitive industry, *Journal of Political Economy* 102, 322-47.

Entrepreneurship and industry evolution: empirics

Caves, Richard E., 1998, Industrial organization and new findings on the turnover and mobility of firms, *Journal of Economic Literature* 36, 1947-82.

Dunne, Timothy, Mark J. Roberts, and Larry Samuelson, 1988, Patterns of firm exit and entry in U.S. manufacturing industries, *Rand Journal of Economics* 19, 495-515.

Klepper, Steven, and Elizabeth Grady, 1990, The evolution of new industries and the determinants of market structure, *Rand Journal of Economics* 21, 27-44.

Pakes, Ariel, and Richard Ericson, 1998, Empirical implications of alternative models of firm dynamics, *Journal of Economic Theory* 79:1, 1-45.

Class 7: Lerner (March 11)

Industry races

Gans, Joshua, and Scott Stern, 2003, The product market and the market for “ideas”: Commercialization strategies for technology entrepreneurs, *Research Policy* 32, 333-50.

Gilbert, Richard J., and David M. G. Newbery, 1982, Preemptive patenting and the persistence of monopoly, *American Economic Review* 72, 514-26.

Henderson, Rebecca M., 1993, Underinvestment and incompetence as responses to radical innovation: Evidence from the photolithographic alignment equipment industry, *Rand Journal of Economics* 24, 248-70.

Lerner, Josh, 1997, An empirical exploration of a technology race, *Rand Journal of Economics* 28, 228-47.

Reinganum, Jennifer F., 1984, Uncertain innovation and the persistence of monopoly, *American Economic Review* 73, 741-48.

Open source and entrepreneurship

Hann, Il-Horn, Jeff Roberts, Sandra Slaughter, and Roy Fielding, 2002, Economic incentives for participating in open source software, Unpublished working paper, Carnegie-Mellon University.

Lerner, Josh, and Jean Tirole, 2002, Some simple economics of open source, *Journal of Industrial Economics* 52, 197-234.

Lerner, Josh, and Jean Tirole, 2005, The scope of open source licensing, *Journal of Law, Economics and Organization* 21, 20-56.

Varian, Hal, and Carl Shapiro, 2003, Linux adoption in the public sector: An economic analysis, Unpublished working paper, University of California at Berkeley.

No Class for GSAS Spring Break (March 18, 2010)

Module III: Entrepreneurial Finance

Class 8: Lerner (March 25)

Venture capital

Kaplan, Steve, and Antoinette Schoar, 2005, Private equity performance: Returns, persistence and capital, *Journal of Finance* 60, 1791-823.

Kaplan, Steve, and Per Strömberg, 2003, Financial contracting theory meets the real world: An empirical analysis of venture capital contracts, *Review of Economic Studies* 70, 281-315.

Lerner, Josh, Antoinette Schoar, and Wan Wong, 2007, Smart institutions, foolish choices? The limited partner performance puzzle, *Journal of Finance* 62:6, 731-64.

Chemmanur, Thomas, Karthik Krishnan, and Debarshi Nandy, 2009, How does venture capital financing improve efficiency in private firms? A look beneath the surface, Unpublished working paper, Center for Economic Studies. **[REFeree REPORT #2]**

Initial public offerings

Chen, Hsuan-Chi, and Jay Ritter, 2000, The seven percent solution, *Journal of Finance* 55, 1105-31.

Ellis, K., Maureen O'Hara, and Roni Michaely, 2000, When the underwriter is the market maker: An examination of trading in the IPO aftermarket, *Journal of Finance* 55, 1039-74.

Ofek, Eli, and Matthew Richardson, 2003, Dotcom mania: The rise and fall of internet stock prices, *Journal of Finance* 58, 1113-37.

Ritter, Jay R., and Ivo Welch, 2002, A review of IPO activity, pricing, and allocations, *Journal of Finance* 57, 1795-828.

Pástor, Luboš, and Pietro Veronesi, 2006, Was there a Nasdaq bubble in the late 1990s?, *Journal of Financial Economics* 81:1, 61-100.

Class 9: Kerr (April 1)

Banks

Berger, Allen N., Nathan H. Miller, Mitchell A. Petersen, Raghuram G. Rajan, and Jeremy C. Stein, 2005, Does function follow organizational form? Evidence from the lending practices of large and small banks, *Journal of Financial Economics* 76:2, 237-69.

Black, Bernard S., and Ronald J. Gilson, 1998, Venture capital and the structure of capital markets: banks versus stock markets. *Journal of Financial Economics* 47, 243-77.

Black, Sandra E., and Philip E. Strahan, 2002, Entrepreneurship and bank credit availability, *Journal of Finance* 57:6, 2807-33.

Petersen, Mitchell A., and Raghuram G. Rajan, 1995, The effect of credit market competition on lending relationships, *Quarterly Journal of Economics* 110, 407-43.

Petersen, Mitchell A., and Raghuram G. Rajan, 1994, The benefits of lending relationships – Evidence from small business data, *Journal of Finance* 49:1, 3-37.

Angel investors

Berkowitz, Jeremy, and Michelle J. White, 2004, Bankruptcy and small firms' access to credit, *Rand Journal of Economics* 35, 69-84.

Goldfarb, Brent, Gerard Hoberg, David Kirsch, and Alexander Triantis, 2009, Are angels preferred venture investors?, Unpublished working paper, University of Maryland.

Gentry, William M., and R. Glenn Hubbard, 2000, Entrepreneurship and household saving, *Advances in Economic Analysis and Policy* 4, article #1053.

Lamoreaux, Naomi R., Margaret Levenstein, and Kenneth L. Sokoloff, 2004, Financing invention during the second Industrial Revolution: Cleveland, Ohio, 1870-1920, Working paper no. 10923, National Bureau of Economic Research.

Class 10: Nanda (April 8)

Capital constraints: theory

Evans, David S., and Boyan Jovanovic, 1989, An estimated model of entrepreneurial choice under liquidity constraints, *Journal of Political Economy* 97, 808-27.

Holtz-Eakin, Douglas, David Joulfaian, and Harvey S. Rosen, 1994, Sticking it out: Entrepreneurial survival and liquidity constraints, *Journal of Political Economy* 102, 53-75.

Stiglitz, Joseph, and Andrew Weiss, 1981, Credit rationing in markets with imperfect information, *American Economic Review* 71:3, 393-410.

Capital constraints: empirics

Hurst, Erik, and Annamaria Lusardi, 2004, Liquidity constraints, household wealth, and entrepreneurship, *Journal of Political Economy* 112:2, 319-47.

Kerr, William, and Ramana Nanda, 2009, Democratizing entry: Banking deregulations, financing constraints, and entrepreneurship, *Journal of Financial Economics* 94, 124-49.

Kerr, William, and Ramana Nanda, 2010, Banking deregulations, financing constraints, and firm entry size, *Journal of European Economic Association*, forthcoming.

Nanda, Ramana, 2010, Entrepreneurship and the discipline of external finance, Harvard Business School Working Paper.

Module IV: The Real Effects of Entrepreneurship

Class 11: Kerr (April 15)

Entrepreneurship, innovation, and economic growth: theory

Banerjee, Abhijit V., and Andrew F. Newman, 1993, Occupational choice and the process of development, *Journal of Political Economy* 101:2, 274-98.

Barro, Robert, and Xavier Sala-i-Martin, 1995, *Economic Growth*, Cambridge: MIT Press. Selected readings in packet.

Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny, 1991, The allocation of talent: Implications for growth, *Quarterly Journal of Economics* 106, 503-30.

Entrepreneurship, innovation, and economic growth: empirics

Baumol, William J., 1990, Entrepreneurship: Productive, unproductive, and destructive, *Journal of Political Economy* 98, 893-921.

Davis, Steven J., John Haltiwanger, and Scott Schuh, 1996, *Job Creation and Destruction*, Cambridge, MIT Press. Selected readings in packet.

Kortum, Samuel, and Josh Lerner, 2000, Assessing the impact of venture capital on innovation, *Rand Journal of Economics* 31, 674-92.

Samila, Sampsa, and Olav Sorenson, 2010, Venture capital, entrepreneurship and economic growth, *Review of Economics and Statistics*, forthcoming.

Class 12 and Wrap-Up: Kerr (April 22)

Entrepreneurship and economic transition

Fisman, Raymond, and Inessa Love, 2003, Trade credit, financial intermediary development and industry growth, *Journal of Finance* 58, 353-74.

Johnson, Simon, John McMillan, and Christopher Woodruff, 2002, Property rights and finance, *American Economic Review* 92, 1135-56.

de Mel, Suresh, David McKenzie, and Christopher Woodruff, 2007, Returns to capital in microenterprises: Evidence from a field experiment, Unpublished working paper.

[REFEREE REPORT #3]

Klapper, Leora, Raphael Amit, and Mauro F. Guillén, 2009, Entrepreneurship and firm formation across countries, forthcoming chapter in Lerner, Josh, and Antoinette Schoar (ed.), *International Differences in Entrepreneurship*, Chicago, IL: University of Chicago Press.

Global entrepreneurial networks and economic growth

Kerr, William, 2008, Ethnic scientific communities and international technology diffusion, *Review of Economics and Statistics* 90, 518-37.

Nanda, Ramana, and Tarun Khanna, 2010, Diasporas and domestic entrepreneurs: Evidence from the Indian software industry, *Journal of Economics and Management Strategy*, forthcoming.

Saxenian, AnnaLee, 2006, *The New Argonauts*, Cambridge, MA: Harvard University Press. Selected readings in packet.

Saxenian, AnnaLee, with Yasuyuki Motoyama and Xiaohong Quan, 2002, *Local and Global Networks of Immigrant Professionals in Silicon Valley*, San Francisco, CA: Public Policy Institute of California.