Industrial Organization I, Tyler Cowen (x2312, 4910), tcowen@gmu.edu, offices in Arlington (Mercatus) and Carow Hall.

#### **METHODS OF EVALUATION:**

There will be weekly quizzes, a paper, and a final exam. Your grade is determined by the lower of these two magnitudes: the 50-50 average of your exam and paper grade, and your quiz grade. In equilibrium everyone aces the quizzes and the remaining variation is settled by the exam and paper. There are no extensions for the paper due date, which is the date of the final. Papers are never finished, only surrendered. You will be required to submit drafts of your work on the paper well in advance of the due date. All aspects of the honor code apply to this class. The George Mason policy for students with disabilities applies as well, please consult that if it is of relevance.

**READINGS:** Buy Steven Levy's *In the Plex*. Consult the Dennis Carlton text for any undergraduate background you may be lacking.

# I. Competition

Einav, Lira and Levin, Jonathan, "Empirical Industrial Organization: A Progress Report," *Journal of Economic Perspectives*, (Spring 2010), 145-162.

Bresnahan, Timothy F. "Competition and Collusion in the American Automobile Industry: the 1955 Price War," *Journal of Industrial Economics*, 1987, 35(4), 457-82.

Bresnahan, Timothy and Reiss, Peter C. "Entry and Competition in Concentrated Markets," *Journal of Political Economy*, (1991), 99(5), 977-1009.

Berry, Steven and Reiss, Peter, "Empirical Models of Entry and Market Structure," <u>Handbook of Industrial Organization</u>, vol.III, chapter 29.

Asker, John, "A Study of the Internal Organization of a Bidding Cartel," *American Economic Review*, (June 2010), 724-762.

Fontanella-Khan, James and Arash Massoudi. "Megadeals for 2015 hit record high." The Financial Times, September 18, 2015.

Whinston, Michael D., "Antitrust Policy Toward Horizontal Mergers," <u>Handbook of Industrial Organization</u>, vol.III, chapter 36, see also chapter 35 by John Sutton.

"Benefits of Competition and Indicators of Market Power," Council of Economic Advisors, April 2016.

Klein, Benjamin and Leffler, Keith. "The Role of Market Forces in Assuring Contractual Performance." *Journal of Political Economy* 89 (1981): 615-641.

Breit, William. "Resale Price Maintenance: What do Economists Know and When Did They Know It?" *Journal of Institutional and Theoretical Economics* (1991).

Bogdan Genchev, and Julie Holland Mortimer. "Empirical Evidence on Conditional Pricing Practices." NBER working paper 22313, June 2016.

Sproul, Michael. "Antitrust and Prices." *Journal of Political Economy* (August 1993): 741-754.

McCutcheon, Barbara. "Do Meetings in Smoke-Filled Rooms Facilitate Collusion?" *Journal of Political Economy* (April 1997): 336-350.

Hazlett, Thomas W. "Is Antitrust Anticompetitive?" *Harvard Journal of Law and Public Policy*, (Spring 1986).

Crandall, Robert and Winston, Clifford, "Does Antitrust Improve Consumer Welfare?: Assessing the Evidence," *Journal of Economic Perspectives* (Fall 2003), 3-26, available at http://www.brookings.org/views/articles/2003crandallwinston.htm.

FTC, Bureau of Competition, website, <a href="http://www.ftc.gov/bc/index.shtml">http://www.ftc.gov/bc/index.shtml</a>. Read about some current cases and also read the merger guidelines. You'll also find four antitrust cases discussed at the top here:

http://business.fullerton.edu/economics/rmichaels/Econ410/Econ%20410.htm

Parente, Stephen L. and Prescott, Edward. "Monopoly Rights: A Barrier to Riches." *American Economic Review* 89, 5 (December 1999): 1216-1233.

Demsetz, Harold. "Why Regulate Utilities?" *Journal of Law and Economics* (April 1968): 347-359.

Armstrong, Mark and Sappington, David, "Recent Developments in the Theory of Regulation," <u>Handbook of Industrial Organization</u>, chapter 27, also on-line.

Shleifer, Andrei. "State vs. Private Ownership." *Journal of Economic Perspectives* (Fall 1998): 133-151.

Farrell, Joseph and Klemperer, Paul, "Coordination and Lock-In: Competition with Switching Costs and Network Effects," <u>Handbook of Industrial Organization</u>, vol.III, chapter 31, also on-line.

Xavier Gabaix and David Laibson, "Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets," <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=728545">http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=728545</a>.

**Strictly optional**: Ariel Pakes and dynamic computational approaches to modeling oligopoly: <a href="http://www.economics.harvard.edu/faculty/pakes/files/Pakes-Fershtman-8-2010.pdf">http://www.economics.harvard.edu/faculty/pakes/files/Pakes-Fershtman-8-2010.pdf</a>

http://www.economics.harvard.edu/faculty/pakes/files/handbookIO9.pdf

## II. Organization

Gibbons, Robert, "Four Formal(izable) Theories of the Firm," on-line at http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=596864.

"Make Versus Buy in Trucking: Asset Ownership, Job Design, and Information," by George P. Baker and Thomas N. Hubbard, *American Economic Review*, (June 2003), 551-572.

Van den Steen, Eric, "Interpersonal Authority in a Theory of the Firm," American Economic Review, 2010, 100:1, 466-490.

Miller, Merton, and commentators. "The Modigliani-Miller Propositions After Thirty Years," and comments, *Journal of Economic Perspectives* (Fall 1988): 99-158.

Myers, Stewart. "Capital Structure." *Journal of Economic Perspectives* (Spring 2001): 81-102.

Hansemann, Henry. "The Role of Non-Profit Enterprise." *Yale Law Journal* (1980): 835-901.

**Optional**: Charness, Gary and Kuhn, Peter J. "Lab Labor: What Can Labor Economists Learn From the Lab?" NBER Working Paper, 15913, 2010, Lazear, Edward P. "Leadership: A Personnel Economics Approach," NBER Working Paper 15918, 2010, Oyer, Paul and Schaefer, Scott, "Personnel Economics: Hiring and Incentives," NBER Working Paper 15977, 2010.

Cowen, Tyler, Google lecture on prizes, on YouTube.

#### III. Production

American Economic Review Symposium, May 2010, starts with "Why do Firms in Developing Countries Have Low Productivity?" runs pp.620-633.

Dani Rodrik, "A Surprising Convergence Result,"

http://rodrik.typepad.com/dani\_rodriks\_weblog/2011/06/a-surprising-convergence-result.html, and his paper here

 $\frac{http://www.hks.harvard.edu/fs/drodrik/Research\%20papers/The\%20Future\%20of\%20Economic\%20Convergence\%20rev2.pdf}{20Convergence\%20rev2.pdf}$ 

Mandel, Michael and Houseman, Susan, "Not all Productivity Gains are the Same," <a href="http://whatmatters.mckinseydigital.com/growth\_and\_productivity/not-all-productivity-gains-are-the-same-here-s-why">http://whatmatters.mckinseydigital.com/growth\_and\_productivity/not-all-productivity-gains-are-the-same-here-s-why</a>

Michael Spence and Sandile Hlatshwayo, "*The Evolving Structure of the American Economy and the Employment Challenge*," Council on Foreign Relations working paper, March 2011, http://www.cfr.org/industrial-policy/evolving-structure-american-economy-employment-challenge/p24366

Serguey Braguinsky, Lee G. Branstetter, and Andre Regateiro, "The Incredible Shrinking Portuguese Firm," <a href="http://papers.nber.org/papers/w17265#fromrss">http://papers.nber.org/papers/w17265#fromrss</a>.

Nicholas Bloom, Raffaella Sadun, and John Van Reenen, "Recent Advances in the Empirics of Organizational Economics," <a href="http://cep.lse.ac.uk/pubs/download/dp0970.pdf">http://cep.lse.ac.uk/pubs/download/dp0970.pdf</a>.

Nicholas Bloom, Raffaella Sadun, and John Van Reenen, the slides for "Americans do I.T. Better: US Multinationals and the Productivity Miracle," <a href="http://www.people.hbs.edu/rsadun/ADITB/ADIBslides.pdf">http://www.people.hbs.edu/rsadun/ADITB/ADIBslides.pdf</a>, the paper is here <a href="http://www.stanford.edu/~nbloom/ADIB.pdf">http://www.stanford.edu/~nbloom/ADIB.pdf</a> but I recommend focusing on the slides.

Bloom, Nicholas, Raffaella Sadun, and John Van Reenen. "Management as a Technology?" National Bureau of Economic Research working paper 22327, June 2016.

Syerson, Chad "What Determines Productivity?" *Journal of Economic Literature*, June 2011, XLIX, 2, 326-365.

New firms and an employment puzzle,

 $\frac{http://macroblog.typepad.com/macroblog/2011/08/new-firm-employment-puzzle.html?utm\_source=feedburner&utm\_medium=feed&utm\_campaign=Feed%3A+typepad%2FRUQt+%28macroblog%29$ 

David Lagakos, "Explaining Cross-Country Productivity Differences in Retail Trade," Journal of Political Economy, April 2016, 124, 2, 1-49.

Casselman, Ben. "Corporate America Hasn't Been Disrupted." FiveThirtyEight, August 8, 2014.

Decker, Ryan and John Haltiwanger, Ron S. Jarmin, and Javier Miranda. "Where Has all the Skewness Gone? The Decline in High-Growth (Young) Firms in the U.S. National Bureau of Economic Research working paper 21776, December 2015. **NB**: **This paper and the three that follow have some repetition, so read them selectively rather than exhaustively.** 

Decker, Ryan and John Haltiwanger, Ron S. Jarmin, and Javier Miranda. "The Secular Business Dynamism in the U.S." Working paper, June 2014.

Haltiwanger, John, Ian Hathaway, and Javier Miranda. "Declining Business Dynamism in the U.S. High-Technology Sector." Ewing Marion Kauffman Foundation, February 2014.

Haltiwanger, John, Ron Jarmin and Javier Miranda. Where Have All the Young Firms Gone? Ewing Marion Kauffman Foundation, May 2012.

Song, Jae, David J. Price, Fatih Guvenen, and Nicholas Bloom. "Firming Up Inequality," CEP discussion Paper no. 1354, May 2015.

Furman, Jason and Peter Orszag. "A Firm-Level Perspective on the Role of rents in the Rise in Inequality." October 16, 2015.

Andrews, Dan, Chiara Criscuolo and Peter N. Gal. "Frontier firms, Technology Diffusion and Public Policy: Micro Evidence from OECD Countries." OECD working paper, 2015.

Mueller, Holger M., Paige Ouimet, and Elena Simintzi. "Wage Inequality and Firm Growth." Centre for Economic Policy Research, working paper 2015.

http://evansoltas.com/2016/05/07/pro-business-reform-pro-growth/

Berger, David W. "Countercyclical Restructuring and Jobless Recoveries." Yale University working paper, 2012.

Furman, Jason. "Business Investment in the United States: Facts, Explanations, Puzzles, and Policy." Remarks delivered at the Progressive Policy Institute, September 30, 2015, on-line at

https://m.whitehouse.gov/sites/default/files/page/files/20150930\_business\_investment\_in\_the\_united\_states.pdf.

Scharfstein, David S. and Stein, Jeremy C. "Herd Behavior and Investment." *American Economic Review* 80 (June 1990): 465-479.

#### IV. Incentives

Carola Frydman and Dirk Jenter, "CEO Compensation," NBER Working Paper 16585.

Conyon, Martin J. "Executive Compensation and Incentives." Academy of Management Perspectives, 2006.

Kaplan, Steven N. "Executive Compensation and Corporate Governance in the U.S.: Perceptions, Facts and Challenges." Working paper, July 2012.

Robert J. Gordon and Ian Dew-Becker, "Unresolved Issues in the Rise of American Inequality," http://www.people.fas.harvard.edu/~idew/papers/BPEA final ineq.pdf

Acemoglu, Daron and Autor, David, "Skills, Tasks, and Technologies: Implications for Employment and Earnings," http://econ-www.mit.edu/files/5607

Stein, Jeremy C. "Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior." *Quarterly Journal of Economics* 104 (November 1989): 655-670.

http://marginalrevolution.com/?s=short-termism

Ben-David, Itzhak, and John R. Graham and Campbell R. Harvey, "Managerial Miscalibration," NBER working paper 16215, July 2010.

Glenn Ellison, "Bounded rationality in Industrial Organization," <a href="http://cemmap.ifs.org.uk/papers/vol2\_chap5.pdf">http://cemmap.ifs.org.uk/papers/vol2\_chap5.pdf</a>

### V. Sectors: finance, health care, others

Gorton, Gary B. "Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007," <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1401882">http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1401882</a>, published on-line in 2009.

Erel, Isil, Nadault, Taylor D., and Stulz, Rene M., "Why Did U.S. Banks Invest in Highly-Rated Securitization Tranches?" NBER Working Paper 17269, August 2011.

Gompers, Paul and Lerner, Josh. "The Venture Capital Revolution." *Journal of Economic Perspectives* (Spring 2001): 145-168.

Paul Graham, essays, <a href="http://www.paulgraham.com/articles.html">http://www.paulgraham.com/articles.html</a>, and on Google itself, <a href="http://www.slate.com/blogs/blogs/thewrongstuff/archive/2010/08/03/error-message-google-research-director-peter-norvig-on-being-wrong.aspx">http://www.paulgraham.com/articles.html</a>, and on Google itself, <a href="http://www.slate.com/blogs/blogs/thewrongstuff/archive/2010/08/03/error-message-google-research-director-peter-norvig-on-being-wrong.aspx">http://www.slate.com/blogs/blogs/thewrongstuff/archive/2010/08/03/error-message-google-research-director-peter-norvig-on-being-wrong.aspx</a>

Strictly optional but recommended for the serious: Ponder reading some books on competitive strategy, for MBA students. Here is one list of recommendations: <a href="http://www.linkedin.com/answers/product-management/positioning/PRM\_PST/20259-135826">http://www.linkedin.com/answers/product-management/positioning/PRM\_PST/20259-135826</a>

Kotchen, Matthew J. and Moon, Jon Jungbien, "Corporate Social Responsibility for Irresponsibility," NBER working paper 17254, July 2011.

Healy, Kieran. "The Persistence of the Old Regime." Crooked Timber blog, August 6, 2014.

More to be added, depending on your interests.