University of Southern California Department of Economics

Economics 580 **Antitrust Economics and Competition Policy**

Spring 2017

Class Hours: 2-3:50PM, Tuesday and Thursday, and classroom: VKC 102

Instructor: Professor Guofu Tan, guofutan@usc.edu

Office Hours at KAP 334B: Tuesday 4-5PM and by appointment

TA: Shichen Wang with <u>shichenw@usc.edu</u> and office hours at KAP 363 MW 12:30 – 1:30 PM

Course Description: Microeconomic theory provides insights into how a well-functioning market system performs its role in organizing production and consumption activities of individuals in a market-oriented economy. The market system may fail to perform efficiently. For instance, market power by dominant firms can lead to inefficient outcomes. Firms may merge or collude to become dominant. A firm can gain market power legitimately but may abuse its dominant position using certain business practices. Antitrust law (or broadly competition policy) is a set of government regulatory policies that deal with the creation, maintenance and abuse of market power.

This course is intended to introduce students to the economics of antitrust and competition policy, offering some basic analytical tools from the field of industrial economics and applying these to the enforcement of antitrust law and competition policy. A number of antitrust cases and industry studies will be covered in the course. Complementary to regular lectures and discussions, in-class presentations by students will be an important part of this course. We may also invite law professors in antitrust laws and experts from the industry and government enforcement agencies to present in class.

Prerequisites: Economics 500, or Economics 503, or equivalent. Any course on industrial organization and microeconomics (and also game theory and econometrics) would be extremely helpful.

Requirement: Several problem sets (25%), a midterm examination (25%), a research paper (25%), and class participation and presentation (25%).

- a) Problem sets will be assigned regularly.
- b) The midterm exam will be on March 9th.

- c) The requirement for a research paper by each student will be discussed during the semester. A research proposal will be due by March 30th. The final paper should be submitted before May 5th.
- d) A group of 2 students will select and present one paper (published or working paper), or a case study, carefully in class (for about 45 minutes). A list of papers and case studies will be suggested during the semester. You may select the papers and/or cases that you prefer, subject to approval. Students are expected to ask questions and make comments during each presentation.
- e) Participants are expected to read regularly newspapers (e.g., *The Los Angeles Times, The New York Times, Wall Street Journal*) and magazines (e.g., *Business Week*, and *The Economist*) for current news and debates on business strategies and public polices toward businesses, which will be discussed in class.

Main Textbook: Massimo Motta, *Competition Policy, Theory and Practice*. Cambridge University Press, 2004.

Useful books with antitrust case studies: John Kwoka and Lawrence White, *The Antitrust Revolution: Economics, Competition and Policy*, Oxford University Press, several editions

Other reference books include:

Paolo Buccirossi (ed.), *Handbook of Antitrust Economics*, Cambridge, MA: MIT Press, 2008.

Michael Whinston, *Lectures on Antitrust Economics*, Cambridge, MA: MIT Press, 2006.

Jeffrey Church and Roger Ware, *Industrial Organization: A Strategic Approach*, Toronto: McGraw-Hill, 2000.

W. Kip Viscusi, John Vernon, and Joseph Harrington, *Economics of Regulation and Antitrust*, Cambridge MA: MIT Press, 1995.

Topics and References (subject to changes, supplementary materials will be added, and we may not follow the order exactly):

1. Efficiency, Market Failure, and Government Regulation: An Introduction

Motta, Chapter 1

2. Some Basics for Antitrust Economics and Competition Policy Analysis

Market power and welfare Sources of market power and barriers to entry Market definition and the assessment of market power Motta, Chapters 2 and 3.

3. The Economics of Business Strategies

Product differentiation, Price Discrimination, Bundling, Tying and Bundled Discounts, Resale Price Maintenance and Other Vertical Restraints, Contract as a Barrier to Entry, Raising Rivals' Costs

Jeffrey Church and Roger Ware, *Industrial Organization: A Strategic Approach*, Toronto: McGraw-Hill, 2000.

Jean Tirole, *The Theory of Industrial Organization*, Cambridge: MIT Press, 1988.

4. Collusion and Agreements among Horizontal Competitors

Issues: Explicit collusion and tacit collusion, bid-rigging, social costs of collusion, conditions that facilitate collusion, the benefits of cooperation, strategic alliances, estimating damages from price-fixing

Cases: Broadcast Music (1979), Airline Tariff Publishing, Vitamins, GE/Westinghouse (1977), Apple and e-Book Publishers (2012)

Motta, Chapter 4.

Stigler, G. (1964), "A theory of oligopoly." *Journal of Political Economy* 2: 44-61.

Brander, J. and T. Ross (2006), "Estimating damages from price-fixing." *Canadian Class Action Review* 3: 335-369.

Basso, L. and T. Ross (2010), "Measuring the true harm from price-fixing to both direct and indirect purchasers." *Journal of Industrial Economics* 58: 895-927.

Connor, J.M. (2001), "'Our customers are our enemies': The lysine cartel of 1992-1995." *Review of Industrial Organization* 18: 5-21.

Borenstein, S. (1999), "Rapid price communication and coordination: The airline tariff publishing case (1994)," in Kwoka and White.

5. Horizontal Mergers

Issues: Benefits and costs of mergers, unilateral market power and coordinated effect, simulating mergers to predict their effects, economic models of competition, measuring efficiencies of mergers, deadweight loss, merger enforcement guidelines, and welfare standards

Cases: Staples and Office Depot (1997), Oracle and PeopleSoft (2004), AT&T and T-Mobile (2011), Loblaw and Shoppers Drugmart (2015)

Motta, Chapter 5.

Williamson, O. (1968), "Economies as an antitrust defense: The welfare trade-offs." *American Economic Review* 58: 18-36.

Deprano, M. E. and J. B. Nugent (1969), "Economies as an antitrust defense: Comment." *American Economic Review*, vol. 59, pp. 947-953.

Denekere, R. and C. Davidson (1985), "Incentives to form coalitions with Bertrand competition." *RAND Journal of Economics* 16: 473-486.

Perry, M.K. and R. Porter (1985), "Oligopoly and the incentive for horizontal mergers," *American Economic Review* 75: 219-227.

Farrell J. and C. Shapiro (1990), "Horizontal mergers: An equilibrium analysis," *American Economic Review* 80: 107-126.

Waehrer, K. and M. K. Perry (2003), "The effects of mergers in open-auction markets." *RAND Journal of Economics* 38: 287-304.

Dalkir, S. and F. Warren-Boulton, "Prices, market definition, and the effects of merger: Staples-Office Depot - 1997," in Kwoka and White.

6. Vertical Mergers and Vertical Restraints

Practices and issues: Double marginalization, demand-enhancing services, non-linear pricing, resale price maintenance, exclusive territories, exclusive dealing, refusals to deal, vertical mergers, and strategic alliances

Cases: Sylvania, Chrysler, Xerox Canada, Kodak, Aspen Skiing (1985), General Electric and Honeywell, PSKS v. Leegin (2007), Johnson & Johnson (China) (2013)

Motta, Chapter 6.

Mathewson, G. F. and R. A. Winter (1984), "An economic theory of vertical restraints." *RAND Journal of Economics* 15: 27-38.

Winter, R. (1993), "Vertical control and price versus nonprice competition." *Quarterly Journal of Economics* 108: 61-76.

Mathewson, F. and R. Winter (1998), "The law and economics of resale price maintenance," *Review of Industrial Organization* 13: 57-84.

7. Predation, Exclusive Dealing, Tying, and Other Abusive Business Practices

Practices and issues: Predatory pricing, exclusive dealing, bundling and tying, price discrimination, exclusion, and raising rivals' costs

Cases: Standard Oil (1911), American Airline, Microsoft, Tetra Pak (2016).

Motta, Chapter 7.

Aghion P. and P. Bolton (1987), "Contracts as a barrier to entry," *American Economic Review* 77: 388-401.

Salop, S. and D. Scheffman (1987), "Cost-raising strategies." *Journal of Industrial Economics* 36: 19-34.

Whinston, M. (1990), "Tying, foreclosure, and exclusion," *American Economic Review* 80: 837-859.

Rasmusen, E.B., J.M. Ramseyer and J.S. Wiley, Jr. (1991), "Naked exclusion," *American Economic Review* 81: 1137-1145.

Mathewson, F. and R. Winter (1997), "Tying as a response to demand uncertainty." *RAND Journal of Economics* 28: 566-583.

- 8. Other Case studies
- 9. (Optional) Regulating Natural Monopolies: Theory and Practices

Stigler, G. (1971), "The theory of economic regulation." *Bell Journal of Economics and Management Science* 2: 3-21.

Peltzman, Sam (1976), "Toward a more general theory of regulation." *Journal of Law and Economics* 19: 211-240.

Viscusi, W. Kip, John Vernon and Joseph Harrington (1995), *Economics of Regulation and Antitrust*, Cambridge MA: MIT Press.

10. (Optional) Regulation, Deregulation and Antitrust Laws and Enforcement in Developing/Transitional Economies

Armstrong, M. and D. Sappington (2006), "Regulation, competition and liberalization." *Journal of Economic Literature*, June Issue.

STUDENTS WITH DISABILITIES: Students requesting academic accommodations based on a disability are required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure that the letter is delivered to me (or the TA) as early in the semester as possible. DSP is open Monday-Friday, 8:30-5:00. The office is in Student Union 301 and their phone number is (213) 740-0776.

Statement on Academic Integrity: USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect ones own academic work from misuse by others as well as to avoid using another work as ones own. All students are expected to understand and abide by these principles. Scampus, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix **A**: http://www.usc.edu/dept/publications/SCAMPUS/gov/. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/.