

*Economics 220B*  
**REGULATION AND ANTITRUST**

**Description.** This is the second of two graduate courses in industrial organization. It will cover regulation and antitrust policy, concentrating on control of natural and artificial monopoly in theory and in practice. Emphasis will be on theoretical developments although an occasional empirical study or case study will illustrate key points.

**Instructor.** Glenn Woroch, 691A Evans, 642-1507, glenn@econ.berkeley.edu. Office hours: Thursdays, 10:00 AM - 12:00 noon, and by appointment.

**Textbooks.** There is no textbook for this course. Several books cover large portions of the material in the course and have been put on reserve:

- Sandy Berg and John Tschirhart, Natural Monopoly Regulation, Cambridge University Press.
- Alfred Kahn, The Economics of Regulation, volumes I and II, (2nd edition) John Wiley, 1997.
- Richard Schmalensee, The Control of Natural Monopoly, Ballinger, 1979.
- William Sharkey, The Theory of Natural Monopoly, Cambridge University Press, 1982.
- Daniel Spulber, Regulation and Markets, MIT Press, 1991.
- Kenneth Train, Optimal Regulation, MIT Press, 1991.

**Assignments.** Students will select a paper, either one of the optional readings or a paper that we agree upon, and present it to the class. Each student will also write a paper of moderate length on a topic related in some manner to the economics of regulation. I will distribute a list of suggested topics shortly. Lastly, there will be a final exam.

**READING LIST**

\* - required, in reader

**I. NATURAL MONOPOLY AND ITS REGULATION**

**1. Efficiency and Stability of Monopoly**

- \* Panzar, J., "Technological determinants of firm and industry structure," Chapter 1 in Handbook of Industrial Organization, North-Holland, 1989.
- \* David Evans and James Heckman, "Multiproduct cost function estimates and natural monopoly tests for the Bell System," in Breaking Up Bell, edited by David Evans, 1983.
- \* Faulhaber, G., "Cross-subsidization: pricing in public enterprises," American Economic Review, 1975.
- Gerald Faulhaber and Levinson, "Subsidy free prices and anonymous equity," American Economic Review, 1981.

**2. Efficient Pricing**

- \* Stephen Brown and David Sibley, "Welfare and efficiency in pricing," in The Theory of Public Utility Pricing, 1986.
- \* Baumol, W. and D. Bradford (1970), "Optimal departures from marginal cost pricing," American Economic Review, June.
- Panzar, J., "A neoclassical approach to peak load pricing," Bell Journal of Economics, 1976.
- Braeutigam, R., "Optimal pricing with intermodal competition," American Economic Review, 38-49, 1979.
- Bobby Willig, "Pareto-superior nonlinear outlay schedules," Bell Journal of Economics, 1979.

### **3. Reality Check: Alternative Explanations of Regulatory Policy**

- \* Stigler, George, "The Theory of Economic Regulation," The Bell Journal of Economics and Management Science, vol. 2, no. 1, pp. 3-21 1971.
- \* Posner, R., "Taxation by regulation," Bell Journal of Economics, 1971
- \* Joskow, P., "Pricing decision of regulated firms: a behavioral approach," Bell Journal of Economics, 1973.
- \* Peltzman, S., "Towards a more general theory of regulation," Journal of Law & Economics,  
Noll, R., "Economic perspectives on the politics of regulation," in Handbook of Industrial Organization, 1989.

## **II. ACTUAL REGULATORY PRACTICE**

### **1. Rate of Return Regulation**

- \* Baumol, W. and A. Klevorick, Input choices and rate of return regulation: an over of the discussion," Bell Journal of Economics, 1970.
- \* Craig Petersen, "An empirical test of regulatory effects," Bell Journal of Economics, Spring 1975.
- \* Averch, H. and L. Johnson, "Behavior of the firm under regulatory constraint," American Economic Review, December, 1962.  
Bailey, E., "Regulation and innovation," Journal of Public Economics, December 1974.  
Ordoover, J., A. O. Sykes and R. Willig, "Nonprice Anticompetitive Behavior by Dominant Firms toward the Producers of Complementary Products," in Antitrust Regulation: Essays in Memory of John J. McGowan, Franklin Fisher (ed.), MIT Press, 1985

### **2. Contracts vs. Administration**

- \* Demsetz, H., "Why regulate utilities?" Journal of Law & Economics, 1968.
- \* Goldberg, V., "Regulation and administered contracts," Bell Journal of Economics, 1976.
- \* Williamson, O., "Franchise bidding for natural monopoly: in general and with respect to CATV," Bell Journal of Economics, 1976."

### **3. Price Cap and Benchmark Regulation**

- \* Michael Beesley and Stephen Littlechild, "The regulation of privatized monopolies in the U.K.," Rand Journal of Economics, 20:3, Autumn 1989.  
Vogelsang, I., "Price cap regulation," Rand Report, 1988.
- \* Andre Shleiffer, "A theory of yardstick competition," Rand Journal of Economics, 1985.

## **III. DESIGN OF OPTIMAL REGULATORY MECHANISMS**

### **1. Iterative and Dynamic Mechanisms**

- \* Vogelsang, I. and J. Finsinger, "A regulatory adjustment process for optimal pricing by multiproduct monopoly firms," Bell Journal of Economics, 1979.
- \* Sappington, D., "Strategic firm behavior under a dynamic regulatory adjustment process," Bell Journal of Economics, Spring, 1980.  
Salant, D., and G. Woroch, "Trigger price regulation," Rand Journal of Economics, Spring 1992.  
Gilbert, R., and D. Newbery, "The dynamic efficiency of regulatory constitutions," draft, 1991.  
Blackmon, G., and R. Zeckhauser, "Fragile commitments and the regulatory process," Yale Journal on Regulation, 9:1, Winter, 1992.  
John Logan, Rob Masson and Bob Reynolds, "Efficient regulation with little information: reality in the limit?" International Economic Review, 30:4 November 1989.

### **2. Agency Approach**

- \* Loeb, M., and W. Magat, "A decentralized method for utility regulation," Journal of Law & Economics, 1979.
- \* Baron, D., and R. Myerson, "Regulating a monopolist with unknown costs," Econometrica, July

1982.

Laffont, J.-J., and J. Tirole, "Using cost observation to regulate firms," Journal of Political Economy, 1986.

#### IV. APPLICATIONS

##### 1. Privatization

- \* Jean-Jacques Laffont and Jean Tirole, "Privatization and incentives," Chapter 17 in A Theory of Incentives in Procurement and Regulation, 1993.
- John Vickers, "Privatization and the risk of expropriation," draft, June 1991.

##### 2. Diversification

- \* Braeutigam and John Panzar, "Diversification incentives under 'price based' and 'cost based' regulation," Rand Journal of Economics, 20:3, Autumn 1989.
- \* Tim Brennan, "Understanding the AT&T divestiture," Antitrust Bulletin.

##### 3. Bypass

- \* Sharkey, W., "Natural monopoly and the telecommunications industry," in The Theory of Natural Monopoly, Cambridge University Press, 1982.
- Paul MacAvoy, Dan Spulber and Bruce Stangle, "Is competitive entry free? Bypass and partial deregulation in natural gas markets," Yale Journal on Regulation, 6:2, Summer 1989.
- Jean-Jacques Laffont and Jean Tirole, "Bypass and creamskimming," Chapter 6 in A Theory of Incentives in Procurement and Regulation, 1993.
- Gary Biglaiser and Albert Ma, "Regulating a dominant firm: unknown demand and industry structure," draft, October 1993.

#### VI. ANTITRUST POLICY

##### 1. Monopoly Power and Predation

- \* McGee, John, (1958), "Predatory Price Cutting: The Standard Oil (N.J.) Case," Journal of Law and Economics, pp. 137-169.
- \* Ordover, J., and R. Willig, "An economic definition of predation: pricing and product innovation," Yale Law Journal, 1981.
- \* Department of Justice, "The Merger Guidelines."
- Willig, R., (1991), "Merger Analysis, Industrial Organization Theory, and Merger Guidelines," Brookings Papers: Microeconomics 1991, pp. 281-332.
- Baker, J., and T. Bresnahan, (1985), "The Gains from Merger or Collusion in Product Differentiated Industries," Journal of Industrial Economics, 33:4, pp. 427.

##### 2. Vertical Restraints

- \* Mathewson, F., and Winter, R. A., (1983), "The Economics of Vertical Restraints in Distribution," in New Developments in the Analysis of Market Structure New York: Macmillan.
- \* Krattenmaker, T., and S. Salop, "Anticompetitive exclusion: raising rivals' costs to achieve power over price," Yale Law Journal, 1986.
- \* Ordover, J., G. Saloner, and S. Salop, (1990), "Equilibrium Vertical Foreclosure," American Economic Review, vol. 80, no. 1, pp. 127-147.
- Whinston, Michael D., (1990), "Tying, Foreclosure, and Exclusion," American Economic Review, vol.80, no. 4, pp.837-859
- Economides, N., and G. Woroch, "The benefits and pitfalls of interconnection," draft, 1993.