

# The Political Economy of Government Regulation

Spring 2006

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Lecture MW 2:30-4:00

Office hours: Th 1pm – 4pm\*

**Description:** A theoretically-driven survey of the regulation of social and economic activity as it is carried out by governments and government agencies. We will address the following questions: How in fact do regulations arise and evolve? What are their politics – that is, how to organized political agents influence their origination, change, enforcement? What are the rationales for regulation of economic industries? Do regulations achieve their desired objectives? How would we know if they did, or did not? How do changes in economic regulations change firm behavior, both individually and in the aggregate?

My hope is that this course offers some advantages over other courses on regulation offered elsewhere in the world. First, the primary aim of the course is to introduce theoretical models and metaphors that can be applied to a wide variety of regulatory regimes and policies. With that in mind, a good portion of our reading and work will be theoretical and methodological in nature. Not all of the theoretical and methodological work will be mathematical – for instance, the writings of Sam Huntington, Stephen Breyer, George Stigler, and others – but much of it will be.

Second, this course aims to take a more rigorous approach to regulation than is usually offered. The standard approach to regulation [witness Viscusi, Vernon and Harrington] is to start with analysis of the unregulated market, to point up “market failures,” and then to analyze regulations as potential correctives to the unregulated market. While often valuable – and we will occasionally entertain such reasoning – I will in this course aim for a more scientific approach that takes regulations as given and asks where they come from. Under this approach, not only is regulation endogenous, so is deregulation, and so is the “free market.” Put differently, since most markets are in fact regulated and have been regulated in one form or another, will not use the unregulated market as our primary reference point.

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\* In some cases subsets of these hours will be held. In addition, I am teaching an undergraduate course this semester and please be apprised of the fact that some of these hours will be taken up by Harvard undergraduates enrolled in that course.

Relatedly, the aim is to address the historical development of regulation and regulatory policies in a way that is as thorough and methodologically-driven as possible. The study of regulation is full of neo-Lamarckian functionalist reasoning – i.e., because a policy had effects  $X$  (public interest, capture), it must have been the case that politicians/groups designed the policy with effects  $X$  in mind. By a more careful and scientific approach, I hope that we can evaluate claims about regulation, recognizing indeterminacy where it exists.

Third, I have attempted to include a judicious balance of the “golden oldies” of regulatory theory as well as selected new research that emphasizes where the theory is going. I do so with the explicit understanding that much previous work in the field of regulatory economics and regulatory politics is poorly conceived and poorly carried out. A lot of new research in these fields promises to change that.

In this respect, much of the technical material consulted in this course departs from the standard technology of general equilibrium theory used in older political economy analyses, and focuses instead upon decision-theoretic, stochastic and game-theoretic models. The aim is to build up models of regulatory systems, markets, and political regimes from a scientific base of micro-level models.

I will attempt on occasion to deal with the most current issues of regulatory policy, including energy regulation, emissions trading, telecomm deregulation, and FDA drug approval. Another of my hopes is that, as the semester progresses, we can dirty our hands with actual analyses of regulatory implementation, politics, and effects. As part of these assignments, and as part of a final paper, you will seek out your own data sets and documents on regulation and conduct theoretical and empirical analyses of the policies that you read about.

After a brief theoretical introduction, we will launch into 12 straight weeks of deeply empirical readings and reflection on the operation of federal regulatory polices in the U.S. The first two weeks do not, however, end our engagement with the theory of regulation. Each empirical module will be used to delve further into theories of policy operation. The empirical modules (with the corresponding agencies whose actions we will study) are as follows:

- *energy and environmental* (EPA, FERC, utility regulation)
- *transportation* (ICC, FAA, DOT)
- “regulation of risk,” or *labor, workplace and environmental safety* (NLRB, OSHA)
- *pharmaceutical* (FDA, EU).

We may replace the transportation module with another module. I shall, however, leave antitrust to another course. I previously studied telecomm in this course but it seems now to have become a subject of its own, so I leave it out this semester.

**Requirements:** Three individual written assignments and problem sets (each 3-5 pages) over the course of the semester and, most important, a team-researched, team-written paper that evaluates theoretically and empirically an existing federal government

regulation (25-30 pages, with additional supporting documentation if necessary). This effort can be solo, but some efforts will require teams.

**Prerequisites:** There are no absolute prerequisites, but this is a graduate class, and the student will find the course easier if he or she knows some calculus, statistics, a working knowledge of U.S. government, some decision theory or game theory, and some microeconomic concepts. We will cover some game theory and decision theory, namely some basic signaling games, auditing games, and problems of irreversible investment, as well as some stochastic models (e.g., multi-armed bandits) which embed learning.

Students will be asked to evaluate theoretically and empirically a government regulatory policy or a proposed alternative (or, if you prefer, a policy alternative that you propose).

### **Readings:**

Readings will come in three forms. First, there are books listed below, for sale at the Coop. Second, a packet of readings will be available. Finally, I will place a number of papers on the class Web page, or e-mail students these papers, or direct students to papers available on other web pages.

I should say here that my assignment of books, articles, does not connote an agreement with any of them. In fact, much of our time will be spent picking apart the arguments of these authors.

[**Breyer 1**] Breyer, Stephen. *Regulation and Its Reform* (Cambridge: Harvard University Press, 1980). [Nth edition]

[**Carpenter**] Carpenter, Daniel P. *The Forging of Bureaucratic Autonomy: Reputations, Networks and Policy Innovation in Executive Agencies, 1862-1928* (Princeton: Princeton University Press).

[**James**] James, Scott. *Presidents, Parties and the State: A Party-System Perspective on Democratic Regulatory Choice* (Cambridge).

[**Avorn**] Jerry Avorn, *Powerful Medicines* (Knopf).

[**Viscusi**] *Fatal Tradeoffs: Public and Private Responsibilities for Risk* (Oxford).

[**Troesken**] Troesken, Werner. *Why Regulate Public Utilities?* (Michigan)

[**Rothenberg**] *Politics, Organization and Regulation: Interstate Trucking Regulation at the ICC* (Michigan)

[Possibly some selections from the new Breyer book]

### **Optional:**

This is a textbook used in many courses:

[VWH] W. Kip Viscusi, John M. Vernon and Joseph E. Harrington, Jr. *Economics of Regulation and Antitrust*, Third Edition, (MIT Press, 2000).

## Schedule of Lectures and Readings

### I. MODULE ONE: INTRODUCTION AND GENERAL THEORIES OF REGULATION

**(Wednesday, February 1st):** Introductory Lecture: Dilemmas of Regulation.

**Theme A: The Public Interest Theory of Regulation [1 session] (Monday, February 6<sup>th</sup>)**

Readings: Stephen Breyer, "Typical Justifications for Regulation," Chapter 1 in *Regulation and Its Reform*.

Pigou, A.C. *The Economics of Welfare* (1938), Part I, Chapter 32, Part II, Chapter 22. These are on the "web."

A note: what is left of the public interest theory of regulation is discussed here. It's a sad commentary on the level of theoretical development in this genre that something written in the 1930s is considered the sole theoretical alternative to capture and rent-seeking theories. For more interesting, more theoretically developed and more tenable models that are an alternative to capture, see Theme C below.

**Theme B: The Capture Theory of Regulation [1 week; 2 sessions] (Wednesday, February 8<sup>th</sup> and Monday, February 13<sup>th</sup>)**

Readings: Marver Bernstein, *Regulating Business by Independent Commission*, Chapter 10 and 11 (packet).

Huntington, Samuel P. 1952. "The Marasmus of the ICC: The Commission, the Railroads, and the Public Interest." *The Yale Law Journal*. 61: 467-509. [E]

George Stigler, "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science*, issue date. [E]

Possibly chapter one of Werner Troesken, *Why Regulate Public Utilities?*

Djankov, La Porta, Lopes-de-Silanes, and Shleifer, The Regulation of Entry, *Quarterly Journal of Economics*, Vol CXVII, Issue 1, 2002. [E]

Laffont, Jean-Jacques, and Jean Tirole. 1991. "The Politics of Government Decision-Making: A Theory of Regulatory Capture." *Quarterly Journal of Economics* 4 (November): 1089–1127. [E]

Peltzman, Sam. "Toward a More General Theory of Regulation." *Journal of Law and Economics*, 1976, 19 (2), Conference on the Economics of Politics and Regulation), pp. 211-40. [E]

**Theme C: Informational and Reputational Theories of Regulation [1 week, 2 sessions]  
(Wednesday, February 15<sup>th</sup> and Monday, February 20<sup>th</sup>)**

Carpenter, Introduction and Chapter One of *The Forging of Bureaucratic Autonomy*.

Carpenter, "Protection without Capture: Product Approval by a Politically Responsive, Learning Regulator," *American Political Science Review* 98 (4) (November 2004) 613-31. [E]

Carpenter and Ting, "A Theory of Approval Regulation," typescript, Harvard University. [Web, or distributed]

Krause, G., and Douglas, "Institutional Design versus Reputational Effects on Bureaucratic Performance: Evidence from U.S. Government Macroeconomic and Fiscal Projections," *Journal of Public Administration Research and Theory* [J-PART] 2005; 15: 281-306. [E]

Murray Horn, *The Political Economy of Public Administration* (Cambridge, 1997).

Gordon and Hafer, "Avoiding Regulation," manuscript, Department of Politics, NYU. How public interest regulation would be infrequently observed even if it were the driving rationale for regulation. [Web]

Gordon and Hafer, "Flexing Muscle: Corporate Political Expenditures as Signals to the Bureaucracy," *American Political Science Review* 99 (2) (June 2005). [E]

## II. MODULE TWO – MONOPOLY AND ASYMMETRIC INFORMATION: REGULATING ENERGY PRODUCTION AND CONSUMPTION

Note: We begin with energy for two reasons. First, you will undoubtedly have noticed how timely this subject is, with petroleum-based fuel prices rising and falling recently. Yet energy regulation is also crucial because it is here that we find the form of regulation – price regulation of a governed monopoly provider – which has most occupied the minds of scholars of regulation. That is a good and bad thing. The credit owed to all of this work is that scholars understand very well the dynamics of regulating a monopoly provider. The

bad thing is that, empirically and especially theoretically, most other forms of regulation have been relatively ignored.

### **Theme A: How We Got Utility Regulation [Feb 22]**

Theme I Readings: [required] Werner Troesken, *Why Regulate Utilities? The Chicago Gas and Electric Industry, 1845-1925* (Ann Arbor: University of Michigan Press, 1999). [Troesken asks a question that seems to have eluded most readers: how did regulation of this sort arise in the first place?]

[required] Scott James, *Presidents, Parties and the State*, chapter on Public Utility regulation Act of 1935.

### **Theme B: Utility Regulation and the Averch-Johnson Critique. [Feb 27]**

Readings: Breyer, “Cost-of-Service Ratemaking,” Chapter 2 in *Regulation and its Reform*.

Averch, Johnson, “Behavior of the Firm under Regulatory Constraint,” *American Economic Review*. [E] We will walk through this model pretty closely.

[Background]: VVH, “Theory of Natural Monopoly” and “Natural Monopoly Regulation and Electric Power,” chapters 11 and 12.

### **Theme C: Regulating Monopolies: The Problem of Asymmetric Information [Mar 1, 3]**

Theme II Readings: [required] Baron and Besanko, “Regulation, Asymmetric Information, and Auditing,” *RAND Journal of Economics* 15 (4): 447-470. [E]

For a similar model as applied to the legislature-versus-bureaucracy problem, see Jeffrey S. Banks, “Agency Budgets, Cost Information, and Auditing,” *American Journal of Political Science* [E]

Baron and Myerson, “Regulating a Monopolist with Unknown Costs,” *Econometrica* 50 (4) (July 1982): 911-930. [E] [this paper is quite technical but worth spending some time with.]

[This week offers a brief introduction to signaling games. Consult Jeffery Banks, *Signaling Games in Political Science*, for an accessible review of these models; another nice treatment is Fudenberg and Tirole, *Game Theory*. for another nice treatment, see James Morrow, *Game Theory for Political Scientists*. ]

**Theme D. Federal Regulation of Energy: Nuclear Power, licensing & other regulations upon the production and distribution of energy [Mar 3]**

Readings: David Spence, “Managing Delegation Ex Ante: Using Law to Steer Administrative Agencies,” *Journal of Legal Studies*. 28:413-59 (1999). [E]

Gordon and Hafer, “Flexing Muscle: Corporate Political Expenditures as Signals to the Bureaucracy,” *American Political Science Review* 99 (2) (June 2005). [E] We will have entertained this theoretical perspective before; for now, focus on the empirics of this piece, how they assembled the data set, etc.

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**Optional Theme II E: The Energy Crisis in California (and elsewhere?)**

Paul L. Joskow and Edward Kahn, “A Quantitative Analysis of Pricing Behavior in California’s Wholesale Electricity Market During Summer 2000,” manuscript, AEI Joint Center for Regulatory Studies. [Web page]

Utility Reform Network, “COOKING THE BOOKS: How PG&E and S E hide assets, artificially inflate their power purchase costs, and want consumers to pay for it.” [Web page]

Report by JBS Energy, at <http://www.jbsenergy.com>

Survey documents available at the Department of Energy website: <http://www.eia.doe.gov/cneaf>

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## MODULE III: ENVIRONMENTAL REGULATION

Please note that the subject of environmental policy – including environmental economics, environmental history, and environmental politics – has become something of a subfield unto itself in recent years. And I do not pretend to be an expert in this subfield. Accordingly, our survey or work will be selective, focusing only on some general theoretical considerations and a select few empirical studies.

**Theme III A: History and The Rationale for Environmental Regulation and the Clean Air Act of 1970. [Mar 8]**

[Details and some history of Clean Air Act of 1970 discussed in class.](#)

Readings: “Partial Mismatch: Spillovers and Environmental Protection,” Chapter 14 in Breyer, *Regulation and its Reform*.

William A. Pizer, "Optimal Choice of Policy Instrument and Stringency under Uncertainty: The Case of Climate Change," Resources for the Future Working Paper. Alternatively, chapter from Dixit and Pindyck, Investment under Uncertainty, on valuing externalities under uncertainty and irreversible environmental action.

[Optional]: VVH, "Introduction: The Emergence of Health, safety, and Environmental Regulation," "Valuing Life and Other Nonmonetary Benefits," and "Environmental Regulation"; Chapters 19-21.

**Theme III B: What are the Effects of Environmental Regulation and how Ought we to Evaluate Them? [1 week, 2 sessions] [Mar 10, 15]**

Readings: Adam B. Jaffe, Steven R. Peterson, Paul R. Portney, Robert N. Stavins. "Environmental Regulation and the Competitiveness of U.S. Manufacturing? What Does the Evidence Tell Us?" *Journal of Economic Literature* 33 (1) (March 1995) 132-163. [E]

Michael Greenstone, "The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act Amendments and the Census of Manufacturers." *Journal of Political Economy*, 2002, 110(6). [E]

Kenneth Chay and Michael Greenstone, "Air Quality, Infant Mortality, and the Clean Air Act of 1970," *American Economic Review* [E].

K. Chay and M. Greenstone, "Does Air Quality Matter? Evidence from the Housing Market," *Journal of Political Economy*, April 2005, 113(2). [E]

M. Greenstone, "Did the Clean Air Act Amendments Cause the Remarkable Decline in Sulfur Dioxide Concentrations?" *Journal of Environmental Economics and Management*, 2004, 47. [E]

Kenneth Chay and Michael Greenstone. "The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession," *Quarterly Journal of Economics*, 2003, 118(3). [E]

Randy Becker and Vernon Henderson. 2000. "Effects of Air Quality Regulations on Polluting Industries," *Journal of Political Economy* 108 (2) (April 2000) 379-421. [E]

Andrew B. Whitford and Eric Helland, "Pollution Incidence and Political Jurisdiction: Evidence from the TRI," *Journal of Environmental Economics and Management*, Vol. 46, No. 3, pp. 403-424, 2003 [E]

Andrew B. Whitford, "The Pursuit of Political Control by Multiple Principals," *Journal of Politics*, Vol. 67, No. 1, pp. 39-49, 2005 [E]

Evan J. Ringquist. 1993. "Does Regulation Matter? Evaluating the Effects of State Air Pollution Control Programs," *Journal of Politics* 55 (4) (Nov 1993) 1022-1045. [E]

Canes-Wrone, Brandice. "Bureaucratic Decisions and the Composition of Lower Courts." *American Journal of Political Science* 47 (2003): 205-214 [E]

Winston Harrington, Richard D. Morgenstern, and Peter Nelson. "On the Accuracy of Regulatory Cost Estimates," Resources for the Future working paper. [Web]

Ted Gayer, James T. Hamilton, and W. Kip Viscusi, "Private Values of Risk Tradeoffs at Superfund Sites: Housing Market Evidence on Learning about Risk," *Review of Economics and Statistics* 82:3 (August 2000), 439-451. [E]

Ted Gayer, "The Fatality Risks of Sport-Utility Vehicles, Vans, and Pickups Relative to Cars," *Journal of Risk and Uncertainty* 28:2 (2004), 103-133. [E] This paper relevant to studies re the Corporate Average Fuel Economy (CAFÉ) standards.

### **Theme III C: Federalism, Political Dilemmas and Environmental Enforcement [Mar 15]**

Readings: B. Dan Wood, "Federalism and Policy Implementation: The Case of Clean Air," *American Journal of Political Science* 1992. [E]

Hird, J. (1990) "Superfund Expenditures and Cleanup Priorities: Distributive Politics or Public Interest?" *Journal of Policy Analysis and Management*, 9:455-83.

"Pollution Incidence and Political Jurisdiction: Evidence from the TRI," Eric Helland and Andrew Whitford, manuscript. [Web page]

Cynthia Lin, "How should standards be set and met? An incomplete contracting approach to regulatory delegation,"  
[http://kuznets.fas.harvard.edu/~cclin/papers/delegation\\_paper.pdf](http://kuznets.fas.harvard.edu/~cclin/papers/delegation_paper.pdf)

### **Theme III D: Policy Alternatives in Environmental Regulation -- Pollution Emissions Trading, Self-Regulation [Mar 17]**

Juan-Pablo Montero, "Voluntary Compliance with Market-Based Environmental Policy: Evidence from the U. S. Acid Rain Program," *Journal of Political Economy*, Vol. 107, No. 5. (Oct., 1999), pp. 998-1033.

Joskow, Paul L., and Richard Schmalensee. "The Political Economy of Market-Based Environmental Policy: The U.S. Acid Rain Program." *Journal of Law and Economics* 41 (1998): 37-83. [E]

U.S. EPA, "A Summary of U.S. Effluent Trading and Offset Projects." [Web]

Nathaniel O. Keohane, Richard L. Revesz and Robert N. Stavins, “The Positive Political Economy of Instrument Choice in Environmental Policy,” Resources for the Future working Paper. [Web]

Potoski, Matthew and Aseem Prakash. 2005. “Green Clubs and Voluntary Governance: ISO 14001 and Firms’ Regulatory Compliance” *American Journal of Political Science* 49:2(April) 235-248. [E]

Prakash, Aseem and Matthew Potoski. Forthcoming. “Racing to the Bottom?: Globalization, Environmental Governance and ISO 14001” *American Journal of Political Science* [E]

## MODULE V: THE REGULATION OF TRANSPORTATION

### **Theme A: The Evolution of Transportation Regulation in the U.S. [Mar 20]**

Readings: Skowronek, *Building a New American State*, Chapter 5. [packet]

Scott C. James, *Presidents, Parties and the State*, Chapters 1 and 2.

### **Theme B: Trucking Regulation under the Rationale of “Excessive Competition.” [Mar 22]**

Reading: Rothenberg, Lawrence. *Regulation, Organizations and Politics: Trucking Regulation at the ICC* (Ann Arbor: University of Michigan Press), Chapters.

Breyer, “Mismatch: Excessive Competition and the Trucking Industry,” Chapter 12 in *Regulation and its Reform*.

[Article on effects of trucking regulation.](#) Some sort of reading that shows that reg hasn’t died just b/c ICC is no longer around.

Next in this module by transiting slightly from environmental regulation with the CAFE standards. These are both environmental regulations and transportation regulations, inasmuch as the production of transportation vehicles is *directly* regulated.

### **Theme C: Airline Regulation and Deregulation. [Mar 22, finish leftovers on Apr 3]**

Readings: Thomas McCraw, *Prophets of Regulation*. [Two chapters on Alfred Kahn.](#)

Breyer, “Mismatch: Excessive Competition and Airline Regulation,” Chapter 11 in *Regulation and its Reform*.

Optional: VVH, Chapter 17.

## MODULE VI: THE REGULATION OF RISK in LABOR and SAFETY

### Theme A: OSHA Regulation: Does it Work? What are its Effects? [Apr 3]

Viscusi, *Fatal Tradeoffs*, selections.

V. Kip Viscusi. "The Impact of Occupational Health and Safety Regulation," *Bell Journal of Economics* 10 (1979): 117-140. [E]

John Scholz and Wayne Gray. "Can the Government Facilitate Cooperation? An Informational Model of OSHA Enforcement," *American Journal of Political Science* (1997).[E]

Optional:

VVH, Chapters 19, 20, 23.

### Theme B: Political Influences over Labor Regulation [Apr 5]

Moe, "Control and Feedback in Economic Regulation: The Case of the NLRB," *American Political Science Review* (1985). [E]

Scholz, Twombly, and Headrick. "Street-Level Political Controls Over Federal Bureaucracy," *American Journal of Political Science* 41:693-717. [E]

Greg Huber, "Information or Influence? Explaining Variation in Enforcement Outcomes," manuscript, Department of Political Science, Yale University.

## MODULE VII: THE REGULATION OF HEALTH TREATMENTS AND PHARMACEUTICALS

**Theme A: History and Possible Rationales. [Apr 10, 12]** [Notice that the literature on both of these is severely underdeveloped.] 1 week, 2 sessions

### Session 1: The History:

Marc Law, "History of Food and Drug Regulation in the United States." Refereed entry for the EH.NET *Encyclopedia of Economic and Business History* (edited by Robert Whaples), October 2004.

Marc Law, "'The Origins of State Pure Food Regulation." *Journal of Economic History*, December 2003, v. 63 (4): 1103-1130. [E]

Carpenter, “Multiple Networks and the Autonomy of Bureaus,” Chapter 8 of *The Forging of Bureaucratic Autonomy*; also Chapter 6.

Carpenter and Sin, “Crisis and the Emergence of Social Regulation: The Food, Drug and Cosmetic Act of 1938” [Web]

### Session 2: Rationales

Breyer, “Standard Setting,” Chapter 5 in *Regulation and its Reform*.

Avorn, *Powerful Medicines*, selections.

Carpenter, “A Simple Model of Placebo Learning with Self-Remitting Diseases,” manuscript, Harvard University.

Carpenter, “A General Model of Placebo Learning: How More Consumer Options Can Increase Learning Bias and Reduce Welfare,” manuscript, Harvard University.

For the Carpenter placebo-learning models, see Bertsekas, D. and S. Shreve, *Stochastic Optimal Control: The Discrete-Time Case* (Belmont, MA: Athena Scientific).

## **Theme B. Theories of Regulatory Behavior [Apr 17]** [here, too, not much published]

Carpenter, “Protection without Capture: Product Approval by a Politically Responsive, Learning Regulator,” *American Political Science Review* 98 (4) (November 2004) 613-31. [E]

We will walk mathematically through a reduced form of this model. For background, see Karatzas, Ioannis, and Steven E. Shreve. 1991. *Brownian Motion and Stochastic Calculus*. 2nd ed. New York: Springer-Verlag. Less technically and quite clearly, see Avinash K. Dixit, *The Art of Smooth Pasting* (Chur, Switzerland: Harwood Academic 1993).

Carpenter and Ting, “A Theory of Approval Regulation,” typescript, Harvard University. [Web, or distributed]

## **Theme C. The Clinical, Political and Strategic Dynamics of Drug Development and Approval (2 sessions on these empirical studies) [Apr 19, 24]**

David Dranove and David Meltzer, “Do Important Drugs Reach the Market Sooner?” *RAND Journal of Economics* issue specifics. [E]

Olson, “Firm Influences on FDA Drug Approval,” *Journal of Economics and Management Strategy* 1997. [E]

Carpenter, D.P. “Groups, the Media, Agency Waiting Costs, and FDA Drug Approval,” *American Journal of Political Science* (July 2002).

Carpenter, Turenne, et al, “Why do Bigger Firms Receive Faster Drug Approvals?” manuscript, Harvard University. [Web]

Carpenter, Rynbrandt, et al, “Early Entrant Protection in Approval Regulation: Theory and Evidence from New Drug Review in the United States.” [Web, or distributed]

**Theme D: The Effects of Pharmaceutical Regulation** (1 session on these empirical studies)  
**[Apr 26]**

Sam Peltzman. “An Evaluation of Consumer Protection Legislation: The 1962 Drug Amendments,” *Journal of Political Economy* 1973. [E]

Lacy Glenn Thomas, “FDA Impacts on Innovation,” *RAND Journal of Economics* 1987 [E].

**Theme E: Postmarketing Safety [May 1]**

Avorn, *Powerful Medicines* (selections).

Carpenter and Ting, “Regulatory Error under Two-Sided Uncertainty.” [Web, or distributed.]

Carpenter and Ting, “The Political Logic of Regulatory Error,” *Nature Reviews* (2005). [E]

**Theme F: Recent Policy Reforms and Their Evaluation [May 3]**

Carpenter, Chernew, Fendrick... Approval Times for New Drugs: Does the Source of Funding for FDA Staff Matter? *Health Affairs*

Berndy, Philipson, Stroeck, “PDUFA Paper,” *Nature Reviews – Drug Discovery* (2005) [E]

Carpenter, Lok, and Tjoa. Paper replicating and critiquing Berndt, et al. [E]

Reports from Public Citizen, Tufts Center for the Study of Drug Development. [Web]

Mary Olson, Paper on User Fees. [Packet or Web]

The Political Economy of Deregulation and Regulatory Restraint.

Johnston, Jason Scott. 2002. "A Game-Theoretic Analysis of Alternative Institutions for Regulatory Cost-Benefit Analysis." *University of Pennsylvania Law Review* 150 (May): 1343–1428.

## OPTIONAL MODULE: TELECOMM REGULATION

### 1: Monopolies, Networks and Rationales for Regulation.

Breyer, "Allocation under a Public Interest Standard," Chapter 4 in *Regulation and its Reform*.

VVH, "Dynamic Issues in Natural Monopoly Regulation: Telecommunications," Chapter 15.

### 2: How has Regulation Operated?

Breyer, "Problems of a Possible Match: Natural Monopoly and Telecommunications," Chapter 15 in *Regulation and its Reform*.

[Optional] VVH, "Franchise Bidding and Cable Television," Chapter 13.

### 3: Political Influences in FCC Regulation

Readings: William Gormley, "A Test of the Revolving Door Hypothesis," *AJPS* 1979. [J-STOR]

Daniel Carpenter, "Adaptive Signal Processing, Hierarchy and Budgetary Control in Federal Regulation," *APSR* (1996). [J-STOR]

Charles Shipan, *Designing Judicial Review: Interest Groups, Congress and Telecommunications Policy* (Ann Arbor: University of Michigan Press, 1998), selections. [packet]

### 4: Telecomm Deregulation. Has it Worked?

Readings: Heli A. Koski and Sumit K. Majumdar, "Paragons of Virtue? Competitor Entry and the Strategies of Incumbents in the US Local Telecommunications Industry," The Research Institute of the Finnish Economy. [Web]

JAMES R. GREEN\* and DAVID J. TEECE\*\*, "FOUR APPROACHES TO TELECOMMUNICATIONS, DEREGULATION AND COMPETITION: THE U.S., U.K., AUSTRALIA AND NEW ZEALAND," Haas School of Business Working Paper. [Web]