



ECONOMICS OF REGULATION AND ANTITRUST

SECOND EDITION

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ECONOMICS OF REGULATION AND ANTITRUST

Second Edition

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This book is dedicated to:

Kira and Michael

Michelle, Julie, John, and Chris

Joe and Kathryn

Preface to the Second Edition

One of the most exciting areas of economic policy is government regulation and antitrust. These efforts affect virtually all aspects of our lives, ranging from the food we eat to the prices we pay. This policy area has undergone dramatic changes in the past two decades. The traditional topics in this area would have included issues such as setting appropriate trucking rates as well as conventional antitrust issues. However, in many areas of economic regulation there has been substantial deregulation as market forces in a larger and more competitive economy have been given more rein. New areas of economic regulation have developed, such as those pertaining to the regulation of cable television rates. In addition, there has been an entirely new wave of government regulation, chiefly relating to the environment and safety, which involves a substantial commitment of economic resources.

The emerging character of regulation has been accompanied by an intellectually vibrant economic literature. Economists have developed new theories to characterize firm behavior and to assess which market contexts warrant government intervention. Our view of which situations of apparently excessive market power warrant government interference has changed dramatically.

Economists have also developed new methodologies to deal with emerging health, safety, and environmental regulations. These regulatory efforts were largely nonexistent two decades ago, and the economic literature addressing these issues was similarly undeveloped. In this book we will attempt to convey the general character of the principles guiding economic regulation in this and other areas as well as the most salient aspects of these policies.

The traditional emphasis of economics textbooks on business and government is on the character of regulations and antitrust policies. This treatment is built around the question: what are these policy mechanisms, and how do they operate?

The orientation of *Economics of Regulation and Antitrust* is quite different. Rather than start with the institutional aspect of regulatory and antitrust policies, we begin with the economic issues at stake. What particular market failures provide a rationale for government intervention? How can economic theory illuminate the character of market operation, the role for government action, and the appropriate form of government action? What do formal empirical analyses of economic behavior and the effects of government intervention indicate about the direction that this intervention should take? To provide the most up-to-date answers to these important questions, we base our analysis on new developments in economic theory and empirical analysis that have been specifically devised to further understanding of regulations and antitrust policies.

Because this has been a fertile area of economic research for several decades, a large body of economic reasoning can be brought to bear in analyzing these issues. *Economics of Regulation and Antitrust* is the only economics textbook whose focus derives from the insights that economic reasoning can provide in analyzing regulatory and antitrust issues. This approach contrasts with previous treatments, which concentrate on the character of these policies and relegate the economic issues to a minor role.

This approach, which we established in the first edition, has been carried forward in this edition as well. New topics, such as the regulation of environmental tobacco smoke, have been added. Other topics, such as pharmaceutical regulation and the new price competition in electric power, have been given entirely new treatments to reflect the changing emphasis of government policy.

The chapters covering the airline, cable television, and telecommunications industries have been updated in light of more recent analyses and the evolving nature of technology and regulation. The most up-to-date studies assessing the impact of airline deregulation on market concentration, air fares, and airline safety have been covered. Important regulatory changes with regard to cable television rates have taken place in recent years. These developments are extensively reviewed, as are analyses that estimate the effect of regulatory policies on those rates. One of the major regulatory issues of the day relates to telecommunications and the digital convergence of communications, computers, and entertainment. Additional sections have been added to cover these regulatory issues as they pertain to both traditional and wireless local telephone, long-distance telephone, and cable television.

Our emphasis on economic principles in no way implies a neglect of the pertinent institutional features. This text includes extensive case studies of major areas of regulation and antitrust policy, including entire chapters devoted to such issues as government merger policies, cable television regulation, and transportation regulation. Indeed, this text is unique in its extensive coverage of several of these topics, as well as issues such as the role of the White House regulatory oversight process. Although this book discusses essential aspects of these regulations and their performance, our intent is not to provide students with a list of case names, government rules, and other institutional details. Rather, we hope to provide students not only with pertinent insights today but also with the economic tools to analyze the implications of regulations and antitrust policies a decade from now. Future policies may have a quite different structure from those presently in place, and it is the economic framework we use to approach these issues that will be of lasting value.

The minimum economics background needed for this book is an introductory price theory course. This background will enable students to grasp all of the empirical material as well as most of the theoretical developments. In some cases, the text advances to a level at which some background in intermediate microeconomic theory is desirable, but these more difficult sections can be omitted. A unique feature of this book is that it brings to bear on these issues new developments in industrial organization and game theory. Presentation of this more advanced material is self-contained, does not involve the use of calculus, and is incorporated in chapters in such a way that it can easily be omitted by an instructor with a different course emphasis.

We have used drafts of this book in our teaching at the undergraduate level and in business school curricula. Others have used this book in law schools and public policy schools. In no case did we use all of these chapters in any one course. Although the book's coverage is nearly encyclopedic, it is still not all-inclusive. It is doubtful whether any single course can successfully cover all the material included in this book, except perhaps in an intensive two-semester sequence. Because instructors have a variety of different interests and instructional needs, we have structured the book in a manner that will facilitate its use in a variety of contexts.

Organization of the Book

Economics of Regulation and Antitrust consists of two introductory chapters, followed by three parts. The beginning of the book sets the stage and introduces some of the overriding issues, such as ascertaining what the objective is that government regulators maximize and considering the appropriate division of labor between the states and the federal government.

The following three parts of the book present the core of the analytical material. Part I focuses on antitrust policy, Part II deals with economic regulation, and Part III focuses on social regulation and patent policy. Each of these parts is structured in a similar manner. The first chapter of each part provides an overview of the key economic issues as well as the pertinent methodology that will be employed. We discuss the principal market failures in this context, and how economic analysis is used to address them. In every case, the first chapter of each part can be viewed as essential reading. The instructor can then select which of the subsequent case studies to use. Chapters that require the student to have read another chapter within that part, other than the

introductory chapter, are noted below. Otherwise, chapters within a part can be assigned in whatever order the instructor wishes. Any chapters that the instructor wishes to omit may be excluded.

Part I, which focuses on antitrust policy, includes a healthy dose of the analytical tools of modern industrial organization. Chapter 3 is an introductory overview of antitrust policy and of the other chapters in Part I. Efficiency and technical progress are explained in Chapter 4 as tools for evaluating policies. At least the first half of this chapter is probably necessary reading for understanding Chapters 5–9.

Oligopoly and collusive pricing (Chapter 5) is novel in introducing oligopoly through a game-theoretic approach and then relating the theoretical models to antitrust cases. Market structure and entry deterrence (Chapter 6) is mostly analytical; it can be skipped by instructors under time pressure in courses with a primary focus on antitrust cases. The remaining three chapters—horizontal and conglomerate mergers (Chapter 7), vertical mergers and restrictions (Chapter 8), and monopolization and price discrimination (Chapter 9)—are “stand-alone” chapters that can be assigned or not, depending on the instructor’s preference.

Part II addresses the role of economic regulation. As evidenced by the dozen or so case studies in this part, economic regulation has been an integral part of the U.S. economy. Although there has been substantial deregulation of airlines, trucking, and long distance telephone, the debate over appropriate regulatory policies and re-regulation is still very active.

An overview of economic regulation, including its historical development and a summary of regulatory practices, is provided in Chapter 10. This chapter also provides the most in-depth textbook discussion of the efforts of social scientists to understand the extent of government regulation. The remainder of Part III is comprised of two pieces. Chapters 11–15 cover the regulation of natural monopolies. The recent theory of natural monopoly is presented in Chapter 11, while Chapter 12 reviews actual regulatory practices with respect to electric utilities and local telephone companies. Although regulation is the standard U.S. government response to natural monopolies, alternatives are available; these are discussed in Chapters 13 and 14. Chapter 13 addresses a new and promising approach, franchise bidding, and provides a detailed case study of cable television. A more traditional alternative is that of government enterprise. It is reviewed in Chapter 14, along with a comparative analysis of government ownership and regulation with respect to electric utilities. Then, in Chapter 15, some dynamic issues related to monopoly regulation are explored in the context of the rapidly changing long distance telecommunications market.

The regulation of markets that are potentially competitive receives in-depth treatment in the remaining three chapters of Part II. A theoretical investigation of the effects of regulation is provided in Chapter 16. These ideas are then applied to regulation in the transportation and energy industries. Chapter 17 closely examines airlines and surface freight transportation (in particular, trucking and railroads), while Chapter 18 covers the crude oil and natural gas industries.

Part III focuses on the new forms of risk and environmental regulation that emerged primarily after the 1970s. Chapter 19 introduces the principal methodological issues, including market failures such as externalities and inadequate risk information, the primary economic test of benefit-cost analysis that applies in this area, and the rather daunting task that economists face in assigning dollar values to outcomes such as a five-degree temperature change in the early part of the next century.

The task of assigning market prices to outcomes that, by their very nature, are not traded in efficient markets is the focus of Chapter 20. The primary case study concentrates on how economists attempt to assign a dollar value to risks to human life, which illustrates how economists have attempted to assess the pertinent tradeoff rates that should be used in evaluating government policies. The next four chapters deal with various types of social regulation policies, including environmental protection regulation (Chapter 21), product safety regulation (Chapter 22), occupational safety regulation (Chapter 23), and pharmaceutical regulation (Chapter 24). Chapter 22 presents the greatest variety of social regulation issues that have been of long-term interest to researchers in industrial organization and in law and economics. A major strength of all these chapters is that they confront the current policy issues now under debate, including topics such as global warming, the role of product liability law, and the social consequences of smoking.

Chapter 24, on patents and pharmaceuticals, is new to the second edition. It combines the theory of patents with a case study of their application to one of the most technologically progressive U.S. industries. It is a particularly timely addition to the book, given the current interest in health care reform.

Suggested Course Outlines

An intensive one-year course could cover this entire book. However, in most cases, instructors will be using the book in a context in which it is not feasible to cover all the material.

In Table A we have identified six different course approaches and the pertinent chapters that can be assigned for each one. The first type of

Table A
Suggested Course Outlines

Course Focus	Introduction		Part I							Part II									Part III					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Balanced one-quarter course	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓							✓	✓			✓	
Antitrust			✓	✓	✓	✓	✓	✓	✓															
Economic regulation	✓	✓		✓						✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓
Social regulation	✓	✓		✓															✓	✓	✓	✓	✓	✓
Industrial organization			✓	✓	✓	✓		✓		✓			✓			✓	✓	✓					✓	✓
Institutional	✓	✓	✓	✓		✓	✓			✓		✓							✓	✓	✓	✓	✓	✓

course is the balanced one-quarter course. Such a course would include the introductory material in Chapters 1 and 2 as general background; Chapters 3–5, 7, and 9 from Part I; Chapters 10 and 12 from Part II; and Chapters 19, 20, and 22 from Part III.

The second course approach is a conventional antitrust course. It would place the greatest reliance on Part I of the book, which includes Chapters 3–9. Instructors who wish to provide a broader perspective on some of the other topics in regulation might augment these chapters with the indicated chapters for the one-quarter course.

A course focusing on economic regulation would include primarily the introductory section and Part II of the book, or Chapters 1–2, 4, 10–18, 22, and 24. Similarly, a course focusing on social regulation would include the introductory section and Part III of the book, or Chapters 1–2, 4, and 19–24. In situations in which we have taught such narrowly defined courses, we have often found it useful to include the material from the balanced one-quarter course as well, to give the student a broader perspective on the most salient economic issues in other areas of government intervention.

Given the frontier treatment of industrial organization in Part I, this book could also be used in a policy-oriented course on industrial organization. With Chapters 3–6 providing the theoretical foundation in industrial organization, an instructor could select from the remaining chapters to cover a variety of policy issues. A suggestion is to use Chapter 9 (its coverage of monopolization practices follows up on the theory of strategic entry deterrence in Chapter 6), Chapters 10, 13, and 16–18 (to examine how different types of economic regulatory structures can affect competition), and Chapters 22 and 24 (to assess efforts such as product quality regulation).

The final course outline pertains to courses, particularly those in business schools, that wish to have a more institutional focus. For these

courses, the objective is to focus on the empirical aspects of government regulation and antitrust policies, as well as the character of these policies. Moreover, these courses would require no advanced undergraduate economic methods. The chapters in the book that meet these tests and can be readily grasped with an introductory economics background are also indicated in Table A.

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