

Regulation and Its Reform Stephen Breyer

Copyright © 1982 by the President and Fellows of Harvard College
All rights reserved
Printed in the United States of America
This book has been digitally reprinted. The content remains identical to that of previous printings.

Library of Congress Cataloging in Publication Data

Breyer, Stephen G., 1938– Regulation and its reform.

Bibliography: p. Includes index.

1. Trade regulation—United States. 2. Industry and state—United States. 1. Title.

HD3616.U47B68 353.0082 81-6753

ISBN 0-674-75375-5 (cloth) AACR2

ISBN 0-674-75376-3 (paper)

Regulation and Its Reform

To Leo Roberts

Preface

On its surface this book is aimed at the topical issue of regulatory reform. But underneath it strives to go beyond the topical, seeking to analyze regulation as a distinct discipline and to help teach it as a separate subject. It does so by developing a basic framework that breaks regulation into a manageable number of categories and then analyzes each category primarily by discussing its typical problems.

This approach to an institution—describing it in terms of purposes and typical problems—is that of a lawyer. But the book does not describe regulation in legal terms: its thesis is that in order to generalize usefully about regulation, one must understand the substance of the regulatory program. Thus, useful generalizations will often call for a knowledge of, for example, economics, as well as governmental administration and law. The discussion of regulation is, however, unlikely to be phrased exclusively in the terms used by any of those individual disciplines.

The result is a framework that in Part I is developed in the context of particular regulatory programs. In Part II the discussion relates that framework to other programs, thereby showing that the basic analysis has general applicability. The discussion in Part III turns back to the topical by illustrating how the analysis can be used to help bring about specific regulatory reform.

The face of regulation is changing rapidly, with major reform initiatives either adopted or under serious consideration in transportation, communication, and other areas. In fact, Congress may pass a "generic" regulatory reform bill at the 1981–82 session. These changes, however, are unlikely to limit the usefulness of generalizations drawn from the history of past regulatory programs. On the contrary, lessons from that experience may be particularly useful as legislators seek to change existing systems and as administrators of new programs seek to avoid past mistakes.

The framework presented here grew out of my work on airline deregulation for Senator Edward Kennedy and the Senate Judiciary Committee in 1975. Partial or skeletal versions have appeared in a paper prepared for the First

Boston Corporation (1977), in Chapters 3 and 4 of the report of the American Bar Association's Commission on Law and the Economy, Federal Regulation: Roads to Reform (1978), and in a Harvard Law Review article, "Analyzing Regulatory Failure: Mismatches, Less Restrictive Alternatives, and Reform" (1979). This book allows me to present a more detailed version of the framework with concrete illustrations and allows the reader to judge its usefulness more adequately.

I acknowledge here my considerable intellectual debt to Alfred Kahn, many of whose ideas appear in summary form in Chapters 1 and 2, and to Paul MacAvoy. I am grateful as well for the support—intellectual, material, moral—provided by colleagues at the Kennedy School of Government and Harvard Law School, including, among others, Richard Stewart, Clark Byse, Richard Zeckhauser, Chris DeMuth, Graham Allison, and Albert Sacks. The American Bar Association's Commission on Law and the Economy (including its vice-chairman, Richard Smith), the Health Resources Administration of the Department of Health and Human Services, the Ford Foundation, and the Kennedy School itself also provided invaluable aid.

I am particularly grateful for the efforts of Leonard Stein, whose indefatigable research is most apparent in the footnotes of the early chapters and whose editorial skills are reflected throughout. I would also like to thank Patty Saris for her help on Chapter 17, and Michael Aronson and Maria Kawecki for their editorial assistance.

Regulation and Its Reform

Contents

	Introduction	1
	The Object and Approach of This Book / 4 Limitations / 7	
I	A Theory of Regulation	13
1	Typical Justifications for Regulation	15
	The Control of Monopoly Power / 15 The Traditional Economic Rationale for Regulation. Objections to the Traditional Economic Rationale. Additional Bases for Regulation. Rent Control or "Excess Profits" / 21 What Is a Rent? The Rationale for Regulation. Compensating for Spillovers (Externalities) / 23 What Are Spillovers? The Classical Rationale for Regulation. Objections to the Classical Rationale. A Caveat. Inadequate Information / 26 The Classical Rationale for Regulation. Criticisms of the Rationale. Excessive Competition: The Empty Box / 29 Historical Use. Current Use. Other Justifications / 32 The Mixture of Rationales / 34	
2	Cost-of-Service Ratemaking	36
	The System / 36 The Problems / 37 Determining the Rate Base. Determining the Rate of Return. Efficiency. The "Test Year." Rate Structure. Conclusion / 58	
3	Historically Based Price Regulation	60
	The System / 60	

	The Problems / 62 Categorization. Cost-of-Service Ratemaking. Allocation. Enforcement. New Investment.	
	Conclusion / 70	
4	Allocation under a Public Interest Standard	71
	The System / 72 Problems / 74 What Is to Be Allocated? The Selection Process. The Renewal Process. Conclusion / 94	
5	Standard Setting	96
	The System / 98 The Procedural Background. The Standard-Setting Process. Problems Inherent in the Process / 109 Information. Enforcement. Anticompetitive Effects. Judicial Review. Conclusion / 118	
6	Historically Based Allocation	120
	The System / 120 The Need for Exceptions / 122 The Exception Process / 127 Conclusion / 130	
7	Individualized Screening	131
	The Food Additive Screening System / 133 Problems with This Form of Regulation / 135 Developing a Test for Risk. The Use of Experts. The Effort to be Comprehensive: Calculating and Weighing Benefits. Varying Standards of Selection. Conclusion / 155	
8	Alternatives to Classical Regulation	156
	Unregulated Markets Policed by Antitrust / 156 Disclosure / 161 Taxes / 164 The Creation of Marketable Property Rights / 171 Changes in Liability Rules / 174 Bargaining / 177 Nationalization / 181	
9	General Guidelines for Policy Makers	184

II	Appropriate Solutions	189
10	Match and Mismatch	191
11	Mismatch: Excessive Competition and Airline Regulation The Industry / 198 Regulation / 199 Harmful Effects of Regulation / 200 Mismatch as Cause / 209 Price Regulation. Route Awards. Efficiency. The Effort to Regulate Schedules. An Alternative to Classical Regulation / 219 Conclusion / 220	197
12	Mismatch: Excessive Competition and the Trucking Industry The Industry and Regulation / 222 The Effects of Regulation / 227 Alternatives to Classical Regulation / 234 Conclusion / 238	222
13	Mismatch: Rent Control and Natural Gas Field Prices The Industry / 241 Regulation / 242 Adverse Effects / 244 The Mismatch and the Shortage / 247 Firm-by-Firm Cost-of-Service Ratemaking. Areawide Cost-of-Service Ratemaking. The Mismatch and Natural Gas Allocation / 253 Standard Setting. Public Interest Allocation. Negotiation. Alternatives / 258 Conclusion / 260	240
14	Partial Mismatch: Spillovers and Environmental Pollution The Problems of Standard Setting / 263 Incentive-Based Systems: Taxes and Marketable Rights / 271 In Principle. A More Practical Comparison. Conclusion / 284	261
15	Problems of a Possible Match: Natural Monopoly and Telecommunications The Characteristics of the Longline Problem / 288 The Industry and the Service. Regulation and Joint Costs. The Entry of Competition into Long-Distance Telecommunications.	285

xii / Contents

The FCC's Response to the Problem / 301

	Above 890. MCI. Specialized Common Carriers (SCCs). AT&T's Competitive Response: Special Rates. Docket 18128. Expanding the Area of Competition. The Basic Choices / 311 Conclusion / 314	
III	Practical Reform	315
16	From Candidate to Reform	317
	The Elements of Implementation / 317 The Kennedy Hearings / 321 Preparation. The Actual Hearings. Conclusion / 339	
17	Generic Approaches to Regulatory Reform	341
	Better Personnel / 342 Procedural Changes / 345 Fairness and Efficiency. Legitimacy. Structural Change / 354 Managerial Proposals. Supervisory Proposals. New Institutions. Encouraging Substantive Reform / 363 Impact Statements. Encouraging Step-by-Step Reform.	
App	endix 1 The Regulatory Agencies	371
App	Appendix 2 A Note on Administrative Law	
Fur	Further Reading	
Note	Notes	
Inde	Index	

Introduction

Regulation of the American economy has grown enormously since 1887, when Congress established the first modern regulatory agency—the Interstate Commerce Commission—to regulate railroads.¹ Most of this growth has taken place since the mid-1960s. Until then, regulation had consisted mainly of efforts by both federal and state governments to control prices and entry of utilities, communications firms, and transportation companies. The federal government regulated interstate aspects of railroads, trucks, airlines, telephone service, electricity, radio, television, and natural gas, while state commissions regulated the intrastate portions of these same businesses. The federal government also established safety regulation in the transportation, food, and drug industries, and regulated banks and issuers of securities in order to protect depositors and investors.

Beginning in the mid-1960s the number of federal regulatory agencies and the scope of regulatory activity vastly expanded. The federal government began to regulate oil prices and other aspects of energy production; to impose significant controls upon environmental pollution; and to regulate the safety of the workplace, of the highway, and of consumer products. It increased regulatory protection of investors, including pension holders and commodities traders.

By any measure, regulation expanded quickly and significantly. New governmental bureaus proliferated. The number of pages of federal regulations in the federal register grew from 2,599 in 1936 to 65,603 in 1977, with the number tripling during the 1970s. Federal regulatory budgets grew sixfold during the same decade. Permanent full-time positions in regulatory agencies grew from 28,000 in 1970 to 81,000 in 1979.² Paul MacAvoy, in a careful effort to measure the effects of regulation, included as "regulated" those industries upon which such "economy-wide" regulation as safety regulation has an unusually important impact (industries in which it accounts for 10 percent or more of investment). He estimates that in 1965, 8.5 percent of the gross national product was produced in "regulated" industries. By 1975 that figure had increased to 23.7 percent.³ (See Appendix 1 for tables and figures illustrating this growth.)

As regulation has grown, so has concern about regulatory failure. This concern is not new. The Brownlow Committee, established by President Franklin Roosevelt, found in 1937 that the "independent regulatory commissions constitute a serious and increasing problem." Similarly, the Hoover Commission in 1948 and 1955, the Landis Report in 1960, the Ash Council in 1973, and a host of other reports, commissions, and studies have criticized regulatory agencies, programs, and processes. With the growth in regulation, their criticisms have become severe.

The criticisms of regulation are typically of several sorts. First, some critics emphasize the enormous costs of regulation. Estimates of direct governmental expenditure range from \$3 billion to \$6 billion annually, but estimates of indirect costs, including the costs of compliance, vary from \$60–70 billion annually to double or triple that amount. The most careful study of compliance costs, conducted by the Business Roundtable, showed that forty-eight companies, together accounting for about 8 percent of nonagricultural sales, spent \$2.6 billion to comply with federal regulations (mostly environmental regulations) in 1977. The largest estimate, made by the chairman of the Federal Paperwork Commission, is over \$200 billion a year.

Second, and more important, critics charge that too little is obtained in return for these large expenditures. Thus, MacAvoy argues that the costs of regulation are clear. Before the advent of health, safety, and environmental regulation in the 1970s, for example, the industries that were subsequently particularly subjected to regulation grew faster than others. Now they grow much more slowly (0.4 percent annual rate of growth from 1973 to 1977, compared with 2.1 percent for unregulated industries during the same period). Their prices are significantly higher and output lower. 13 Yet "whether commensurate increases in the quality of work conditions or of the environment have resulted has not been shown." 14 For example, there are numerous statistical studies that seek, but fail to find, any significant effect of workplace safety regulation on accident rates. 15 Although studies of auto safety regulation credit federal regulation with a significant reduction in the number of auto deaths, and the environment is clearly cleaner in some parts of the country, the extent to which regulation can be credited with the improvement and whether its effect is worth its cost are open to debate. 16 Given that many programs have operated effectively for only a few years and given the difficulty of constructing accurate studies to measure and value their impact, the debate over the effectiveness of regulation is likely to continue. At the same time critics of many older regulatory programs, such as those regulating airlines, trucking, and natural gas, have been able to build a strong case that these programs have hurt the general public by bringing about prices that are too high, creating shortages, or both. 17

Third, critics have complained of unfair and unwieldy regulatory procedures. Some complain that the regulatory process is fraught with delay—perhaps the most famous example being the ten years that the Food and Drug Administration spent trying to set standards governing the percentage of pea-

nuts in peanut butter.¹⁸ Other examples, such as the seven years required to set automobile brake standards, are common. Many complain of a practical inability to participate in the formulation of important policies.¹⁹ Although rules of administrative procedure typically require elaborate hearings when a policy is applied, they grant far less opportunity for confrontation or participation when policy is initially formulated. The "informal" formulation of important governmental policy is sufficiently common and sufficiently distrusted that it has led to increased demand for more open proceedings and greater participation by "public interest" lawyers who seek to represent consumers or consumer organizations. This effort is but the latest in a long series of procedural changes and requirements, now embodied in the Administrative Procedure Act, designed to make the regulatory process a fair one.

Fourth, the regulatory process has been criticized as fundamentally undemocratic and lacking legitimacy.²⁰ Regulators are appointed—not elected officials, yet they wield enormous power. How is their exercise of that power to be controlled? At one time, students of the administrative process believed that the congressional statutes themselves would control administrative discretion. If administrators strayed outside their statutory authority, the courts would reverse their action. This hope proved ill-founded, however, for Congress began to delegate authority in very broad terms. At the same time, the courts exercised restraint, hesitating to set aside administrators' action on review. It proved equally illusory to look to regulators as "scientists," professionals, or technical experts, whose discretion would be held in check by the tenets of their discipline. It has become apparent that there is no scientific discipline of regulation, nor are those persons appointed to regulatory offices necessarily experts. Indeed, some of the most successful—as well as some of the least successful—regulators have had political backgrounds and have lacked experience in regulatory fields.

It is currently popular to believe that discretion will be exercised more wisely if representatives of all affected groups participate in the regulatory process, if files and documents are open to the public, and if meetings of regulatory bodies take place in public. Thus, the Freedom of Information Act²¹ and the Government in the Sunshine Act²² have limited significantly the extent to which decisions can be made without public scrutiny. Whether this approach will yield better decisions or limit administrative discretion remains to be seen. Regulators may simply make their decisions without written documentation before the issues are sufficiently formalized for requirements of formal notice and consultation to apply. If so, the regulator will remain vested with nearly uncontrollable discretion, unelected, freed by wide statutory mandates from close judicial scrutiny and unchecked by professional discipline.

Finally, there are those who claim that the regulatory process is unpredictable, even random, in its effects. For example, the process can be used by one competitor to injure another. Western coal producers, for example, may urge the adoption of rules that make it difficult for utilities to burn high-sulfur east-

ern coal, while eastern producers may urge the adoption of rules making it difficult to stripmine western coal. Given the technical nature of such subjects and the ability of firms to hire excellent counsel to argue for them, it becomes difficult for the agency to separate "the public interest" from the private interest of the parties.²³ However, complexity of regulatory subject matter makes it impossible for regulators to consider all the relevant factors or to predict their likely effects. An environmental regulator who seeks to calculate the cost of imposing a standard likely to require a particular type of antipollution equipment may calculate the expected cost to industry by multiplying the capital cost and operating costs of the equipment by the number of firms in the industry. Yet he cannot readily ascertain the relation of one industry to another, or predict, say, a sudden increase in demand for the equipment, which results in a shortage of pumps, which in turn triggers a demand for a wage increase for pump workers, with rippling effects upon similar workers in other industries. Nor can the regulator readily take account of the added uncertainty produced, which might increase the capital costs of smaller firms, leading them to close down, with the possible effect of changing a competitively structured industry into a highly concentrated one. The more widespread, the more technical, the more costly the regulatory requirement, the more difficult it becomes to predict both the microeconomic and the macroeconomic effects of the change.

These criticisms—high cost; ineffectiveness and waste; procedural unfairness, complexity, and delay; unresponsiveness to democratic control; and the inherent unpredictability of the end result—do not apply to every regulatory program nor to every instance of regulation. They vary in their applicability from one time, place, and program to another. Moreover, defenders of particular programs and of regulation in general can respond by pointing to achievements of individual programs or by claiming that in the absence of regulation, matters would be far worse. Yet it seems fair to say that criticism of regulation has grown apace with regulation itself. There is a perceived public demand for reform, and the reform issue now occupies a place of importance on the nation's political agenda.

The Object and Approach of This Book

Given the large number of regulatory programs and the many criticisms of regulation with their varying applicability, it is difficult to think about regulation in general, to assess the criticisms' validity, and to formulate proposals for reform. Discussions of regulation that focus upon individual programs often appear too individualistic, too parochial, or too 'special' to shed much light on regulation in general. On the other hand, efforts to generalize about all 'regulation' often appear too abstract or too prone to exceptions to be of use in formulating policy. If regulators, legislators, or others interested in regulation are to learn from past experience with regulatory programs, and if those

lessons are to be directly useful and applicable to present programs and present problems, a system of categorizing regulation is needed. That system must contain generalizations about regulation that are broad enough to apply to different circumstances, but specific enough to be useful. A major object of this book is to fill that need. The book presents a framework for analyzing regulatory programs and generalizes about typical problems facing each type of regulation. The framework categorizes regulation and organizes insights about regulation so that a student of the subject can understand more readily the problems facing a conscientious regulator. Understanding these problems, in turn, aids in evaluating the strengths and weaknesses of the regulatory process.

At the same time, the book has a broader objective: the development of the framework and the analysis argue, by example and suggestion, for a particular substantive case-by-case approach to regulatory reform, guided by the analysis set forth. In order to evaluate regulation—to understand its strengths and weaknesses—one must automatically isolate existing areas of regulation that appear likely to need reform. These are areas in which the regulatory weapon is not well suited to deal with the problem at hand. In calling attention to those areas, the book may help legislators and policy makers determine where they might most profitably spend their "reforming" energies. It also may help them decide where or whether to design new regulatory programs and to rely instead upon alternatives to traditional systems of regulation—alternatives that tend to be less restrictive, and less intrusive, than full-blown governmental regulation.

Although several chapters of this book focus on specific regulatory programs, the changes suggested are not meant to be definitive. The framework and analysis of regulation are meant only to identify "candidates" for change. Once a particular program has been selected as a candidate, considerable detailed work is required to determine whether change is in fact warranted and to bring it about. The final part of the book describes this process, using the reform of airline regulation as an example.

The framework is built upon a simple axiom for creating and implementing any program: determine the objectives, examine the alternative methods of obtaining these objectives, and choose the best method for doing so. In regulatory matters, this axiom is often honored in the breach. In part, this may be because there is no widely accepted systematic account of the difficulties that accompany the effort to tackle problems through the use of regulation. While the defects of the free market are well recognized and form an important part of a widely accepted theory, ²⁴ the criticisms of regulation tend to be anecdotal or form part of far more controversial theories. Moreover, the potential alternatives to classical regulation, such as taxation, are often not explored in any detail. Too often arguments made in favor of governmental regulation assume that regulation, at least in principle, is a perfect solution to any perceived problem with the unregulated marketplace. Of course, regulation embodies its own typical defects. One of the book's objectives is to present some of these defects