

GOVERNMENT AND THE MARKETPLACE

.....

SECOND EDITION



Peter Asch Rosalind S. Seneca

.....

GOVERNMENT AND THE MARKETPLACE

.....

SECOND EDITION

Peter Asch
Rutgers University

Rosalind S. Seneca
Drew University

The Dryden Press
Chicago New York San Francisco Philadelphia
Montreal Toronto London Sydney Tokyo

.....

Acquisitions Editor: Elizabeth Widdicombe
Project Editor: Teresa Chartos
Design Director: Jeanne Calabrese
Production Manager: Kathy Harsch
Permissions Editor: Doris Milligan
Director of Editing, Design, and Production: Jane Perkins

Text and Cover Designer: Nina Lisowski
Cover Photographer: Peter Peric
Copy Editor: Siobhan Granner
Text Type: Palatino Roman

Library of Congress Cataloging-in-Publication Data

Asch, Peter.

Government and the marketplace.

Includes bibliographies and index.

1. Industry and state—United States. 2. Trade regulation—United States. I. Seneca, Rosalind.

II. Title.

HD36 16.U47A82 1989 338.973 88-7147

ISBN 0-03-021662-1

Printed in the United States of America

890-038-987654321

Copyright© 1989, 1985 by The Dryden Press, a division of
Holt, Rinehart and Winston, Inc.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Requests for permission to make copies of any part of the work should be mailed to: Permissions, Holt, Rinehart and Winston, Inc., Orlando, Florida 32887.

Address orders:

The Dryden Press
Orlando, FL 32887

Address editorial correspondence:

One Salt Creek Lane
Hinsdale, IL 60521

The Dryden Press
Holt, Rinehart and Winston
Saunders College Publishing

**GOVERNMENT AND
THE MARKETPLACE**

.....

SECOND EDITION

.....

For Rita and Joe

The Dryden Press Series in Economics

Asch and Seneca

Government and the Marketplace,
Second Edition

Breit and Elzinga

The Antitrust Casebook: Milestones in Economic Regulation, *Second Edition*

Breit and Ransom

The Academic Scribblers,
Revised Edition

Campbell, Campbell, and Dolan

Money, Banking, and Monetary Policy

Dolan and Lindsey

Economics, *Fifth Edition*

Dolan and Lindsey

Macroeconomics, *Fifth Edition*

Dolan and Lindsey

Microeconomics, *Fifth Edition*

Eckert and Leftwich

The Price System and Resource Allocation, *Tenth Edition*

Fort and Lowinger

Applications and Exercises in Intermediate Microeconomics

Gardner

Comparative Economic Systems

Hyman

Public Finance: A Contemporary Application of Theory to Policy,
Second Edition

Johnson and Roberts

Money and Banking: A Market-Oriented Approach,
Third Edition

Kaufman

The Economics of Labor Markets and Labor Relations, *Second Edition*

Kidwell and Peterson

Financial Institutions, Markets, and Money, *Third Edition*

Landsburg

Price Theory and Applications

Link, Miller, and Bergman

Econograph II: Interactive Software for Principles of Economics

Nicholson

Intermediate Microeconomics and Its Application, *Fourth Edition*

Nicholson

Microeconomic Theory: Basic Principles and Extensions,
Fourth Edition

Pappas and Hirschey

Fundamentals of Managerial Economics,
Third Edition

Pappas and Hirschey

Managerial Economics,
Fifth Edition

Puth

American Economic History,
Second Edition

Rukstad

Macroeconomic Decision Making in the World Economy: Text and Cases,
Second Edition

Welch and Welch

Economics: Theory and Practice,
Third Edition

Yarbrough and Yarbrough

The World Economy: Trade and Finance

PREFACE

This book is concerned with government activity in the marketplace. As such, it is suitable for use in upper-level undergraduate, economics, and business school courses that deal with topics usually called “government and business,” “public policies toward business,” or “government regulation of business.”

Observers of American economics and politics frequently pose some pointed questions about the role of government in what is largely a private enterprise system. For example, if we truly believe in the market, why is public intervention so extensive? Do our government programs generally follow reasonable patterns, providing improvements in social and economic welfare? Or is the picture more ominous—one of government encroachment into the arena of private decision, to the detriment of efficiency and freedom?

Our approach to such questions is consistently to emphasize the economic analysis of public policy—both the motivations for and the effects of government action. Some background in economics is therefore necessary. At a minimum, a course in the principles of microeconomics is required. Familiarity with intermediate microeconomics, although not essential, is also helpful. Although the discussions of theoretical topics are largely self-contained, we also attempt to make accessible to students a number of recent analytical developments that carry important implications for public decision making. Our view is that one need not be an economic theorist to grasp and appreciate relevant concepts, but the stronger one’s background, the easier the assimilation process is likely to be.

There have been many developments in government policy toward industry since the first edition of this book was written. In particular, the movement to deregulate transportation and telecommunications has significantly altered the structure of these industries as well as the public policies that affect them. The energy industry now appears workably competitive and is no longer subject to such extensive regulation; and new policy issues have arisen in the areas of antitrust and in consumer and worker protection.

There have also been changes on the theoretical front. Our understanding of natural monopoly, the strategic behavior of oligopolists, and markets for information has increased. Concepts of fairness and justice in economic policy have come to the fore.

CHANGES IN THIS EDITION

The developments we have noted above are reflected in this edition. We have introduced a separate chapter on the telecommunications industry and expanded our coverage of transportation. The chapter on energy has been dropped. Our discussion of consumer protection issues has been revised and expanded, and we have added a section on worker protection. We have introduced new discussions of justice and placed greater emphasis on efficiency–equity tradeoffs in our consideration of policy issues.

We have tried throughout this edition to provide clear discussions of theoretical topics, supported by additional real-world examples. The policy sections have been updated to include what are in some instances important new developments. Many diagrams have been redrawn for greater clarity, and we have added captions so that readers may work through a diagram without the need to refer back to a separate section in the text. We have also tried to respond to a very large number of helpful specific suggestions that we have received from readers of the first edition.

This edition is accompanied by a new *Instructor's Manual* that focuses on important aspects of each chapter and provides answers to the Discussion Questions.

ORGANIZATION

We have organized the text as follows:

- Part I sets forth the basic issues, including much of the relevant theory underlying government intervention in the marketplace.
- Part II deals with government policies that encourage competition and reliance on the market—the antitrust laws and related enforcement programs.
- Part III, labeled “old-style” regulation, discusses policies in which government substitutes its own decisions for those of the market, at least to a degree. This includes the regulation of industries traditionally defined as public utilities.
- Part IV, labeled “new-wave” regulation, focuses on some forms of public control that represent a relatively recent expansion of government’s role. This expansion, especially in the areas of environmental and consumer protection, is in part a response to economic analyses of problems posed by public goods, externalities, and inefficiencies in information markets.

ALTERNATIVE COURSE OUTLINE

This book is organized in such a way that the relevant theory is systematically developed first (Part I) and then applied in the discussion of three major policy areas (Parts II, III, and IV). The advantage of this approach is that it allows us to apply the full range of tools developed in Part I to each policy area and issue.

Some instructors, however, may prefer that theory and policy chapters be intermingled. Others may find that the book contains more material than can be comfortably covered, particularly in courses that run only one-quarter of an academic year. In either case, the following alternative organization of chapters may prove useful.

Introduction to the Issues

- Chapter 1 A General Overview
- Chapter 2 The Virtues of the Marketplace
- Chapter 6 Corporate Responsibility: An Answer to Market Failure? (This is a floating chapter and may be inserted at any point.)

Antitrust: Theory and Policy

- Chapter 8 The Realm of Antitrust
- Chapter 3 Market Failure: Monopoly
- Chapter 4 Market Failure: Oligopoly
- Chapter 9 The Structure of Industry: Measurement Problems and Evidence
- Chapter 10 Antitrust and Market Power
- Chapter 11 Antitrust and Market Behavior
- Chapter 12 The Effects of Antitrust: Does It Accomplish Anything?

Public Utilities Regulation: Theory and Policy

- Chapter 13 Regulation: Rationale and Basic Principles
- Chapter 14 Regulatory Responses to the Basic Problem
- Chapter 15 Dynamic Efficiency, Optimal Investment, and Regulatory Incentives
- Chapter 16 Regulatory Dilemmas: The Case of Electricity
- Chapter 17 Regulation and Public Policy Paradoxes: Transportation
- Chapter 18 Regulation and Public Policy Paradoxes: Telecommunications
- Chapter 19 General Assessments

New-Wave Regulation: Theory and Policy

- Chapter 20 Why New-Wave?
- Chapter 5 Market Failure: Public Goods, Externalities, and Information Problems
- Chapter 21 Consumer and Worker Protection
- Chapter 22 The Environment

Conclusion

Chapter 23 Where We Stand

Acknowledgments

In preparing this book, we have received a great deal of help and encouragement from our colleagues. We are especially grateful to Almarin Phillips (University of Pennsylvania) and Bruce Seaman (Georgia State University) who gave us generous and incisive comments at all stages of the original manuscript. Numerous helpful suggestions for the first edition were also provided by James Albrecht (Columbia University), John Allison (University of Texas), Ralph Bradburd (Williams College), Lawrence DeBrock (University of Illinois), John Fizel (University of Wisconsin-Eau Claire), Devra Golbe (Hunter College), Larry Herman (Kenyon College), Joseph Hughes (Rutgers University), Harvey Levin (Hofstra University), David Levy (Federal Trade Commission), Matityahu Marcus (Rutgers University), Jack Morgan (University of North Carolina at Wilmington), Jon Nelson (Pennsylvania State University), Cordelia Reimers (Hunter College), George Sweeney (Vanderbilt University), and William Vickrey (Columbia University). Lydia Schafhauser gave us helpful research assistance.

A number of instructors who have used the text in class were kind enough to send us detailed comments and suggestions that we have used in preparing the second edition. These include Louis H. Henry (Old Dominion University), Patrick Kelso (West Texas State University), Stan Long (University of Pittsburgh-Johnstown), Mark McBride (Miami University), and Patricia Pando (Houston Baptist University). The revised manuscript has been read by Paul Graeser (Northern Illinois University), Dennis Ray (University of Wisconsin-Madison), Stephen Walters (Loyola College of Maryland), and Anthony Marino (University of Southern California), all of whom have provided generous and useful criticisms and suggestions. Many helpful comments have also been received from our students and those of other instructors. Needless to say, we bear the sole responsibility for any errors or confusions that may remain.

At the Dryden Press we have benefited from outstanding editorial and professional assistance and encouragement. We are especially indebted to Liz Widdicombe, Stephanie Pawlak, Teresa Chartos, Siobhan Granner, Doris Milligan, Cate Rzasa, and Judy Sarwark, all of whom have guided the book through various stages of development, revision, and production.

This edition of the book now resides in computer disk files, which should greatly facilitate future revisions. We express deep thanks to Andra Velsor for the major, and often frustrating, effort to bring this about.

Finally, we must thank our families for their encouragement and forbearance. For both of us, this is, of course, the greatest debt of all.

Peter Asch
Rosalind S. Seneca
October 1988

About the Authors

Peter Asch, Ph.D. (Princeton) is a Professor of Economics at Rutgers University in New Brunswick, New Jersey. He previously served as an economist at the Antitrust Division of the Department of Justice and as a consultant to public and private agencies on issues of public safety and antitrust policy. Professor Asch is the author of *Industrial Organization and Antitrust Policy* (Wiley, 1983), *Racetrack Betting: The Professors' Guide to Strategies*, with Richard E. Quandt (Auburn House, 1986), and *Consumer Safety Regulation: Putting a Price on Life and Limb*, (Oxford University Press, 1988). Professor Asch is a frequent contributor to professional journals; his articles focus on safety regulation, industrial organization and antitrust policy, and issues of market efficiency. He currently teaches graduate and undergraduate courses in economics and public policy.

Rosalind S. Seneca, Ph.D. (University of Pennsylvania) is a Professor of Economics at Drew University in Madison, New Jersey. She previously served on the faculties of Columbia University and Hunter College of the City University of New York. She is a regular participant in the Knight-Bagehot Fellowship Program at the Columbia Graduate School of Journalism. Professor Seneca has written several articles on aspects of economics policy and currently teaches courses in industrial organization and government regulation of industry.

CONTENTS

Part I

The Basic Issues 1

Chapter 1

A General Overview 3

Introduction 3

Some Basic Economic Functions of Government 6

The Legal History and Status of Government Control of Industry 8

The Nature and Scope of Government in the U.S. Economy 12

Summary 21

Conclusion 22

Chapter 2

The Virtues of the Marketplace 25

Allocative Efficiency 25

The Meaning of Social Choice: Efficiency versus Equity 33

Internal ("X") Efficiency 40

Noneconomic Virtues of the Marketplace 40

Summary 43

Conclusion 43

Appendix 2A The Optimality of Perfect Competition 46

Chapter 3

Market Failure: Monopoly 51

Monopoly Power Defined 52

Monopoly: Good or Bad? 69

Summary 81

Conclusion 82

Chapter 4

Market Failure: Oligopoly 85

The Mutual Interdependence Problem Analyzed 86

Collusion 93

Game Theory and Oligopoly 104

Summary 106

Conclusion 106

Chapter 5

**Market Failure: Public Goods, Externalities,
and Information Problems 109**

Public Goods 109

Externalities 118

Information Problems 126

The Role of Government 129

Summary 133

Conclusion 133

Appendix 5A The Coase Theorem 137

Chapter 6

Corporate Responsibility: An Answer to Market Failure? 139

What Is Social Responsibility 139

Are American Corporations Socially Responsible? 143

Is Social Responsibility Desirable? 145

Conclusion 148

Chapter 7

Summary of the Issues 151

What is Significant Market Failure? 151

Are Markets Fair? 154

A Look Forward and Back 155

Part II

Antitrust Policy 157

Chapter 8

The Realm of Antitrust 159

Why a Public Antitrust Policy? 160

Defining Competition 160

The Antitrust Laws 164

Conclusion 165

Chapter 9

**The Structure of Industry: Measurement
Problems and Evidence 167**

The Structure of the Economy 168

Measuring Monopoly Power: The Structure–Conduct–
Performance Paradigm 173

Practical Problems of Measurement 177

Structure–Performance Models: Empirical Studies 189

Summary 195

Conclusion 195

Chapter 10

Antitrust and Market Power 199

Monopolizing 199

Mergers 206

Treatment of Market Power 215

Proposed Reforms 220

Summary 221

Conclusion 221

Chapter 11

Antitrust and Market Behavior 225

Collusion 225

Price Discrimination 234

Vertical Restraints 243

Predatory Pricing 251

Summary 253

Conclusion 253

Chapter 12

The Effects of Antitrust: Does It Accomplish Anything? 257

Measurement 257

Criticisms of Policy 262

Conclusion 270

Part III

Old-Style Regulation: Public Utilities 273

Chapter 13

Regulation: Rationale and Basic Principles 275

Economic Rationale for Government Regulation 275

Regulation: The Fundamental Dilemma 288

Summary 292

Conclusion 292

Chapter 14

Regulatory Responses to the Basic Problem 295

Marginal Cost Pricing 296

Average Cost or Full Cost Pricing 302

Value of Service Pricing: Optimal Pricing with a Break-Even Constraint 304

Peak-Load Pricing 307

Price Discrimination 312

Summary 314

Conclusion 314

Appendix 14A Peak-Load Pricing: A Numerical Example 316

Chapter 15

Dynamic Efficiency, Optimal Investment, and Regulatory Incentives 319

The Break-Even Constraint 319

Optimal Investment 330

Regulatory Incentives 338

Summary 345

Conclusion 345

Appendix 15A The Optimal Choice of Inputs 347

Appendix 15B The Averch-Johnson Effect 349

Chapter 16

Regulatory Dilemmas: The Case of Electricity 351

Introduction 351

Historical Origins 351

Cost Conditions 354

Demand Conditions 357

Pricing Policy 359

Practical Policymaking: The Commission's Role 370

Summary 377

Conclusion 377

Chapter 17

Regulation and Public Policy Paradoxes: Transportation 379

Introduction 379

Overview of the Industry 380

Price Determination and Regulation: The Theoretical Problem 390

History of Government Regulation and Recent Policy Changes 392

Summary 408

Conclusion 408

Chapter 18

**Regulation and Public Policy Paradoxes:
Telecommunications 411**

Introduction 411

The History of the Industry 413

The Telecommunications Industry before Divestiture 416

The Deal of the Century 422

Telecommunications after Divestiture 424

Summary 433

Conclusion 433

Chapter 19

General Assessments 435

Which Industries Should Be Regulated? 436

How Should Regulation Be Carried Out? 437

How Can Desirable Reform Be Implemented? 440

Part IV

New-Wave Regulation 443

Chapter 20

Why New-Wave? 445

What Is New about the New Wave? 445

Rationales for the New Wave 446

Analytical Developments 447

Summary 448

Chapter 21

Consumer and Worker Protection 449

Introduction 449

Consumer Protection 450

Policy Responses 454

Worker Protection 471

Summary 476

Conclusion 476

Chapter 22

The Environment 479

Pollution and the Case for Intervention 479

What Is Done 489

The Polluting Monopolist: A Second-Best Quirk 497

Summary 499

Conclusion 500

Chapter 23

Where We Stand 503

The Theory and Practice of Government Intervention 503

Has Regulation Worked? 505

Market Failure and Government Failure 507

Summary 508

Name Index 511

Subject Index 517

Case Index 524

PART ONE

• • • • •

The Basic Issues

• • • • •