

The Economics *of* Public Issues

*fourteenth
edition*



Roger LeRoy Miller
Daniel K. Benjamin
Douglass C. North

The Economics of Public Issues

FOURTEENTH EDITION

Roger LeRoy Miller
Institute for University Studies
Arlington, Texas

Daniel K. Benjamin
Clemson University
and PERC, Bozeman, Montana

Douglass C. North
Washington University, St. Louis



Boston San Francisco New York
London Toronto Sydney Tokyo Singapore Madrid
Mexico City Munich Paris Cape Town Hong Kong Montreal

Editor-in-Chief: Denise Clinton
Acquisitions Editor: Roxanne Hoch
Editorial Assistant: Julia Boyles
Managing Editor: Jim Rigney
Sr. Production Supervisor: Katherine Watson
Design Manager: Gina Kolenda
Sr. Manufacturing Buyer: Hugh Crawford
Production House: Orr Book Services
Composition: Nesbitt Graphics, Inc.
Cover Image: Federal Reserve Board and © PictureQuest

Copyright © 2005 by Pearson Education, Inc., publishing as Pearson Addison-Wesley

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of the publisher. Printed in the United States of America.

For information on obtaining permission for the use of material from this work, please submit a written request to Pearson Education, Inc., Rights and Contracts Department, 75 Arlington St., Suite 300, Boston, MA 02116 or fax your request to 617-848-7047.

Library of Congress Cataloging-in Publication Data

Miller, Roger LeRoy.

The economics of public issues/Roger LeRoy Miller, Daniel K. Benjamin, Douglass C. North.—14th ed.
p.cm.

Includes bibliographical references and index.

ISBN: 0-321-30349-0 (alk.paper)

1. Economics. 2. Industrial policy. 3. Economic policy. I. Benjamin, Daniel K. II. North, Douglas Cecil. III. Title

ISBN: 0-321-30349-0

HB171.M544 2005

330.973'0931—dc22

2004028935

1 2 3 4 5 6 7 8 9 10—DOC—09 08 07 06 05

Preface

This book is about some issues of our times. Several of these issues are usually thought of as being inherently noneconomic. Others provide classic illustrations of the core of economic science. Many are controversial and thus are likely to evoke noneconomic reactions to what we have to say. In our view, however, the one feature that ties all of the issues together is that they illustrate the power of economics in explaining the world around us. And, we might add, we hope all of them illustrate that economics can be entertaining as well as informative.

Over the years, we have sought to select issues for this book that, in addition to the attributes just noted, possess a sense of immediacy. The same criterion was used in adding the following new issues for this edition:

- The Mystery of Wealth (*why some nations are rich and others are poor*)
- Expanding Waistlines (*why Americans are getting heavier*)
- Give Me MP3 or Give Me Death (*the real costs of “free” music downloads*)
- Frankenfoods (*the perils and promises of genetically modified crops*)
- A Farewell to Jobs (*why efforts to “save jobs” make us all poorer*)
- The Rise of the Dragon (*does the rise of China spell the demise of America?*)

In addition, numerous readers have requested that we bring back two chapters from prior editions, and so we have complied. The returning chapters (updated, of course) are

- Heavenly Highway (*how a simple market mechanism can eliminate traffic jams*)
- Raising Less Corn and More Hell (*how your tax dollars end up in farmers’ pockets*)

This edition is also marked by one entirely new feature: a list of “Selected Readings,” conveniently collected at the end of the book and organized by chapter. Although these readings only scratch the surface of the rich literature we have drawn upon in preparing this book, the interested reader will be able to use them as a springboard for as much research as she or he wishes to undertake.

Long-time users will recognize that Part Seven has a new title—“International Trade and Economic Prosperity”—that reflects a refocusing of the material in this section. Two of us have a new book (Roger LeRoy Miller and Daniel K. Benjamin, *The Economics of Macro Issues*, Addison-Wesley) that examines monetary and fiscal policy, as well as other topics typically covered in a Principles of Macroeconomics course. Hence, the material in this section, including two entirely new chapters, once again emphasizes the microeconomic foundations of some key economy-wide public policy debates on trade and jobs.

All of the other chapters in this edition have been partially or completely rewritten, and every chapter is, of course, as up-to-date as we can make it. What you will consistently find is a straightforward application of economic principles as they are taught in virtually all courses in economics, public policy, and the social sciences. This book can be understood by those who have taken a course in economics, are taking a course in economics, or have never taken a course in economics. In other words, we have made it self-contained, as well as accessible to a wide range of students.

The chapters are organized into seven parts. Part One examines the foundations of all economic analysis, including the concepts of scarcity, trade-offs, opportunity cost, marginal analysis, and the like. In a sense, the four chapters in this introductory part set the stage for the remaining twenty-eight chapters. The second through sixth parts of the book cover the topics—such as demand and supply, market structures, environmental issues, and the impact of government policies—that are integral to virtually every course in which economics plays a role. At the end of the book, Part Seven examines global affairs, because these matters are an essential part of the public issues of today.

Every part has a several-page introduction that prepares the reader for the material in the following chapters. These part openers summarize and tie together the relevant issues, thus serving as launchpads for the analyses that follow. We hope you will have your

students read these part openers before they embark on any of the chapters they precede.

Every instructor will want to review the *Instructor's Manual* online that accompanies *The Economics of Public Issues*. This is available on supplements central, a secure and password-protected instructor web site (www.awl.com/suppscentral). For each chapter, this manual provides the following:

- A synopsis that cuts to the core of the economic issues involved in the chapter.
- A concise exposition of the “behind the scenes” economic analysis upon which the discussion in the text is based. In almost all cases, this exposition is supplemented with one or more diagrams that we have found to be particularly useful as teaching tools.
- Answers to the “Discussion Questions” posed at the end of the chapter—answers that further develop the basic economic analysis of the chapter, and almost always suggest new avenues of discussion.

The world of public issues continues to evolve. By the time you read this preface, we will be working on the next edition. If you have any particular subjects you would like included in the future, let us know by writing us in care of Addison-Wesley.

Several chapters in this edition draw on the “Tangents” column that Benjamin writes for *PERC Reports*. We are grateful to the Property and Environment Research Center (PERC) for permission to use that material. In addition, dozens of kind users of the last edition of this book, as well as several extremely diligent and thoughtful reviewers, offered suggestions for the current edition. They include

Tim Fuerst, Bowling Green University
 John Horowitz, Ball State University
 R. Ashley Lyman, University of Idaho
 Roger Meiners, University of Texas at Arlington
 Cyril Morong, San Antonio College
 Michael Nelson, Texas A&M University
 Ray Pepin, Stonehill College

Although scarcity precluded the adoption of all of their recommendations, we believe they will be able to identify the impact they each had on this edition. To them and to our users who wrote to us we offer our

sincere thanks, and we hope that they see the end result as being worthy of their time and concern. We also thank Adrienne D'Ambrosio and Kirsten Dickerson for shepherding the project, Sue Jasin for her expert manuscript preparation, and Robbie Benjamin, whose editorial skills once again have improved the final product. All errors remain, of course, solely our own.

R.L.M.
D.K.B.
D.C.N.

Contents

Preface		ix
Part One	The Foundations of Economic Analysis	1
1	Killer Airbags <i>(how a government-mandated "safety device" has killed hundreds of children)</i>	4
2	Terrible Trade-off <i>(when bureaucratic choices mean life for some people—and death for others)</i>	10
3	Flying the Friendly Skies? <i>(how safe is commercial air travel? How safe should it be?)</i>	17
4	The Mystery of Wealth <i>(why some nations are rich and others are poor)</i>	23
Part Two	Supply and Demand	29
5	Sex, Booze, and Drugs <i>(the unintended—and often harmful—consequences of prohibiting voluntary exchange)</i>	32
6	Expanding Waistlines <i>(why Americans are getting heavier)</i>	40
7	Is Water Different? <i>(are "necessities" like water really like other goods?)</i>	46
8	Slave Redemption in Sudan <i>(how well-intentioned efforts to promote freedom can backfire)</i>	53
9	Choice and Life <i>(the economics behind the abortion debate)</i>	58
10	Smoking and Smuggling <i>(why taxes fuel interstate and international trade in bootleg cigarettes)</i>	66

Part Three	Alternative Rationing Systems	71
11	Bankrupt Landlords, from Sea to Shining Sea <i>(when governments lower rents, tenants can suffer)</i>	74
12	Rationing Health Care <i>(the unpleasant consequences of trying to ignore scarcity)</i>	81
13	The Effects of the Minimum Wage <i>(how a "living wage" can ruin the lives of minority youngsters)</i>	88
14	Heavenly Highway <i>(how a simple market mechanism can eliminate traffic jams)</i>	92
Part Four	Market Structures	99
15	Give Me MP3 or Give Me Death <i>(the real costs of "free" music downloads)</i>	103
16	Contracts, Combinations, and Conspiracies <i>(why the NCAA and OPEC have more in common than four-letter names)</i>	110
17	Coffee, Tea, or Tuition-Free? <i>(who wins and who loses from price discrimination)</i>	116
18	Keeping the Competition Out <i>(when the government steps in, the competition steps out)</i>	122
19	The Perils of Product Differentiation <i>(it looks easy, but it's not)</i>	128
Part Five	Political Economy	133
20	Raising Less Corn and More Hell <i>(how your tax dollars end up in farmers' pockets)</i>	136
21	Killer Cars and the Rise of the SUV <i>(why fuel economy kills)</i>	144
22	Crime and Punishment <i>(incentives matter—especially to criminals)</i>	149
23	The Graying of America <i>(America is getting older, and you will foot the bill)</i>	154

Part Six	Property Rights and the Environment	161
24	Frankenfoods <i>(the perils and promises of genetically modified crops)</i>	165
25	The Trashman Cometh <i>(the costs and benefits of recycling)</i>	171
26	Bye, Bye, Bison <i>(why some species are endangered and others aren't)</i>	179
27	Smog Merchants <i>(how markets can reduce pollution)</i>	187
28	Greenhouse Economics <i>(the economics of global climate change)</i>	193
Part Seven	International Trade and Economic Prosperity	199
29	Free Trade, Less Trade, or No Trade? <i>(if free trade is beneficial, why do people complain about it?)</i>	202
30	The \$750,000 Steelworker <i>(the economic consequences of restricting international trade)</i>	208
31	A Farewell to Jobs <i>(why efforts to "save jobs" make us all poorer)</i>	214
32	The Rise of the Dragon <i>(does the rise of China spell the demise of America?)</i>	220
	Glossary	227
	Selected References	233
	Index	243

Suggestions for Use

At the request of our readers, we include the following table to help you incorporate the chapters of this book into your syllabus. Depending on the breadth of your course, you may also want to consult the companion paperback, *The Economics of Macro Issues, 2nd Edition*, which features macroeconomic topics and a similar table in its preface.

Economic Topics	Recommended Chapters in <i>The Economics of Public Issues, 14th ed.</i>
Introduction to Economics	1, 3, 5, 8, 9, 22
Opportunity Costs and Scarcity	1, 2, 3, 9
Demand and Supply	4, 5, 8
Demand and Supply Applications	4, 5, 6, 7, 8, 9, 11, 13, 14, 27
The Public Sector and Public Choice	2, 9, 12, 24, 26, 27, 28
Taxes, Transfers, and Public Spending	10, 12, 17, 20, 23
Consumer Behavior	2, 5, 6, 7, 10
Elasticity of Demand and Supply	5, 6, 7, 10, 11, 12, 13, 14
Rents, Profits, and the Financial Environment of Business	11, 15, 27
Firm Production and Cost	1, 3, 11, 20, 22
Perfect Competition	15, 20
Monopoly	16, 18
Monopolistic Competition	15, 17, 19
Oligopoly	17
Regulation and Antitrust	1, 3, 5, 16, 18
Unions and the Labor Market	13, 16
Income, Poverty, and Health Care	4, 12
Environmental Economics	1, 2, 3, 7, 14, 21, 24, 25, 26, 27, 28
International Trade	29, 30, 31, 32
Comparative Advantage and Trade	4, 23, 29, 31, 32

Part One

The Foundations of Economic Analysis

INTRODUCTION

Our world is one of **scarcity**; we want more than we have. The reason is simple. Although we live in a world of limited **resources**, we have unlimited wants. This does not mean we all live and breathe solely to drive the fastest cars or wear the latest clothes. It means that we all want the right to make decisions about how resources are used—even if what we want to do with those resources is to feed starving children in developing nations.

Given the existence of scarcity, we must make choices; we cannot have more of everything, so to get more of some things, we must give up other things. Economists express this simple idea by saying that we face **trade-offs**. For example, a student who wants higher grades generally must devote more time to studying and less time to, say, going to the movies; the trade-off in this instance is between grades and entertainment.

The concept of a trade-off is one of the (surprisingly few) basic principles you must grasp to understand the economics of public issues. We illustrate the simplicity of these principles with Chapter 1, “Killer Airbags.” It is possible you thought that the government mandated the use of automobile airbags to save people’s lives. Indeed, that may well have been the motivation. But it turns out that airbags also kill some automobile occupants and induce drivers of airbag-equipped cars to drive in ways that endanger themselves

and other persons. So, like many of the issues explored in this book, there is more to automobile safety—and government policy making—than meets the eye, but with the use of some simple economic principles, you can greatly expand both your vision and your understanding of such issues.

Chapter 2, “Terrible Trade-off,” examines a behind-the-scenes trade-off made every day on our behalf by the U.S. Food and Drug Administration (FDA). This federal government agency is charged with ensuring that the new prescription medicines that reach the market are both safe and effective. In carrying out its duties, the FDA requires pharmaceutical companies to subject proposed new drugs to extensive testing before the drugs may be introduced to the market. Additional, exhaustive testing improves the chances that a drug will be both safe and effective, but it also slows the approval of new drugs, thus depriving some individuals of the ability to use the drugs to treat their illnesses. The drug-approval process undoubtedly reduces pain and suffering for some people, and even saves the lives of others, because it reduces the chances that an unsafe or ineffective drug will reach the market. Yet because the process also reduces the rate at which drugs reach the market (and may even prevent some safe, effective drugs from ever being introduced), the pain and suffering of other individuals are increased. Indeed, some people die as a result. This, then, is the terrible trade-off we face in Chapter 2: Who shall live and who shall die?

If trade-offs, or choices, are present in all our activities, we must face the question of how to make the best choices. Economists argue that doing so requires the use of what we call **marginal analysis**. The term *marginal* in this context means incremental, or additional. All choices involve costs and benefits—we give up something for anything that we get. As we engage in more of any activity (eating, studying, or sleeping, for example) the **marginal benefits** of that activity eventually decline: The *additional* benefits associated with an *additional* unit of the activity get lower. In contrast, the **marginal costs** of an activity eventually rise as we engage in more and more of it. The best choices are made when we equate the marginal benefits and marginal costs of activity; that is, we try to determine whether engaging in any more of a given activity would produce additional costs in excess of the additional benefits.

In Chapter 3, “Flying the Friendly Skies?”, we apply the principles of marginal analysis to the issue of airline safety. How safe is it to travel at 600 miles per hour 7 miles above the ground? How safe *should* it be? The answers to these and other questions can be explored using marginal analysis. One of the conclusions we reach is that *perfect* safety is simply not in the cards. Every time you step into an airplane (or even across the street) there is some risk that your journey will end unhappily. As disconcerting as this might sound at first, we think you will find after reading this chapter that once the costs and benefits are taken into account you would have it no other way.

Every choice we make entails a **cost**: in a world of scarcity something must be given up to obtain anything of value. Costs, combined with the benefits of our choices, comprise the **incentives** that ultimately inform and guide our decisions. That these decisions—and thus the incentives—have real and lasting consequences is nowhere more evident than in Chapter 4, “The Mystery of Wealth.” Here we seek to answer a simple but profound question: Why are the citizens of some nations rich while the inhabitants of others are poor? Your initial answer might be, “Because of differences in the **natural-resource endowments** of the nations.” It is surely true that ample endowments of energy, timber, and fertile land all help raise wealth. But it turns out that natural resources are only a very small part of the answer.

Far more important in determining the wealth of the citizenry are the fundamental political and legal **institutions** of a nation. Institutions such as political stability, secure private property rights, and legal systems based on the **rule of law** create the incentives that encourage people to make long-lived investments in improving land and in all forms of physical and human capital. These investments raise the **capital stock**, which in turn provides for more growth long into the future. And the cumulative effects of this growth over time eventually yield much higher standards of living: They make us rich. Thus, incentives, comprising both costs and benefits, turn out to be an integral component of the foundations of economic analysis, as well as the foundations of society.

1

Killer Airbags

Federal law requires that new cars be equipped with devices that kill drivers and passengers. If this sounds odd, the story gets stranger when you realize these devices are supposed to—and sometimes do—*save* lives. The devices in question are airbags, and their saga illustrates almost all of the important principles you should know to understand the economics of public issues.

The airbag story begins in 1969, when the Nixon administration first proposed requiring “passive” restraints that would protect motorists during collisions even if they took no actions to protect themselves. The ideal system was thought to be airbags that would automatically inflate in the event of a collision. But a special government study commission found the airbags then available were not only extremely costly and unreliable but were in fact dangerous to the occupants of cars, especially to young children. So, instead of airbags, the government tried requiring seat belts that prevented cars from being started unless the belts were fastened. Inconvenienced consumers who disliked seat belts quickly rejected these, and the idea of airbags was revived and eventually mandated by the federal government. In anticipation of the requirements that 1998 cars have them on both the driver and passenger sides, automakers began installing airbags on selected models in 1989. By 1997, more than 65 million cars had driver-side bags, and about 35 million had them on the passenger side, too.

At first it seemed as though the earlier problems with airbags had been solved. The installed cost of about \$400 apiece was far less than it would have been when the bags were initially proposed, and their reliability was dramatically increased. News reports soon began appearing with stories of seemingly miraculous survival by occupants of airbag-equipped cars in collisions. By the end of 1995, it was estimated that airbags had saved more than 1500 lives since 1989.

As the population of cars with airbags grew, however, another set of stories began to appear: Airbags deploy at speeds up to 200 mph and are designed to be most effective when used in conjunction with seat belts. It soon became apparent that people who failed to use belts, people who sat closer than the normal distance from the steering wheel or dashboard, and—most ominously—children anywhere in the front seat were at increased risk of serious injury or death due to airbag deployment. By late 1997 it was estimated by the federal government that although a total (since 1989) of perhaps 2600 people owed their lives to airbags, there were more than 80 people, most of them children, who had been killed by the force of normally deploying airbags.

The outcry over the deaths of children killed in low-speed crashes by the very devices that were supposed to protect them generated action by both the private sector and the federal government. Auto manufacturers and their suppliers began developing “smart” airbags that sense the severity of a collision, the size of the person in the front seat, and whether the person is properly belted. Then, depending on the results of those measurements, the bag decides whether to deploy and at what speed it will do so. As an interim solution, in November 1997 (four and a half years after the first documented airbag fatality) the Department of Transportation announced that consumers would be allowed to apply for permission to have airbag cutoff switches installed in their vehicles. The estimated cost to consumers who have the switches installed is \$150 to \$200 per car. State governments also got in the act, with many of them mandating that children under a certain age or size be prohibited from occupying the front seat of an automobile.

Beginning with the 1998 model year, manufacturers also began installing less powerful airbags that inflate 22 percent less quickly on the driver side and 14 percent less quickly on the passenger side. The result has been a sharp reduction in (although not an elimination of)

airbag-induced fatalities. By 2004, more than 130 million autos equipped with airbags were on the road. The federal government had credited the devices with saving 10,300 lives in serious, high-speed crashes since 1989, at a cost of about 230 people—two-thirds of them children—killed by airbag deployments in low-speed crashes.

What can we learn from the airbag episode that will guide us in thinking about other public issues of our times? There are several general principles:

1. *There is no free lunch.* Every choice, and thus every policy, entails a **cost**—something must be given up. In a world of scarcity, we cannot have more of everything, so to get more of some things, we must give up other things. Simply put, we face trade-offs. In this case, although airbags increase the safety of most adults, there is both a monetary cost of \$800 per car and a reduced level of safety for children riding in the front seat.

2. *The cost of an action is the alternative that is sacrificed.* Economists often express costs (and benefits) in terms of dollars, because this is a simple means of accounting for and measuring them. But that doesn't mean costs have to be monetary, nor does it mean economics is incapable of analyzing costs and benefits that are very human. In the case of airbags, the cost that induced action by consumers, manufacturers, and government officials was the lost lives of scores of children.

3. *The relevant costs and benefits are the marginal (or incremental) ones.* The relevant question is not whether safety is good or bad; it is instead how much safety we want—which can only be answered by looking at the added (or marginal) benefits of more safety compared to the added (marginal) costs. One possible response to the child fatalities would have been to outlaw airbags on new cars and mandate that all installed airbags be deactivated. That would have guaranteed that no more children would have been killed by airbags. But for many people (such as those without young children), this solution to airbag fatalities would not be sensible, because the marginal cost would exceed the marginal benefit.

4. *People respond to incentives.* A rise in the apparent costs of using airbags (due to airbag fatalities among children) reduced consumers' desire to utilize airbags and induced them to put pressure on the federal government—pressure that convinced the Department of