# MICROECONOMICS



COLANDER

# Dedicated to the memory of Frank Knight and Thorstein Veblen, both of whose economics have significantly influenced the contents of this book.



#### MICROECONOMICS

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# About the Author



**David Colander** is the Christian A. Johnson Distinguished Professor of Economics at Middlebury College. He has authored, coauthored, or edited over 40 books and over 150 articles on a wide range of economic topics.

He earned his B.A. at Columbia College and his M.Phil. and Ph.D. at Columbia University. He also studied at the University of Birmingham in England and at Wilhelmsburg Gymnasium in Germany. Professor Colander has taught at Columbia University, Vassar College, and the University of Miami, as well as having been a consultant to Time-Life Films, a consultant to Congress, a Brookings Policy Fellow, and Visiting Scholar at Nuffield College, Oxford. In 2001–2002, he was the Kelley Professor of Distinguished Teaching at Princeton University.

He belongs to a variety of professional associations and has been president of both the History of Economic Thought Society and the Eastern Economics Association. He has also served on the editorial boards of the *Journal of Economic Perspectives*, *The Journal of Economic Education*, *The Journal of Economic Methodology*, *The Journal of the History of Economic Thought*, *The Journal of Socio-Economics*, and *The Eastern Economic Journal*. He is chair of the AEA Committee on Electronic Publishing and a member of the AEA Committee on Economic Education.

He is married to a pediatrician, Patrice, who has a private practice in Middlebury, Vermont. In their spare time, the Colanders designed and built their oak post-and-beam house on a ridge overlooking the Green Mountains to the east and the Adirondacks to the west. The house is located on the site of a former drive-in movie theater. (They replaced the speaker poles with fruit trees and used the I-beams from the screen as support for the second story of the carriage house and the garage. Dave's office and library are in the former projection room.)

# Preface for the Professor

"Imagine . . . a textbook that students enjoy!" That comment, from Glen Waddell, who teaches at Purdue, was e-mailed to me as I was struggling to write the preface to an earlier edition. That comment still captures what I believe to be the most distinctive feature of my book. I've always felt that the books students read in their courses should speak to them and be as enjoyable as possible to read. Those beliefs continue to be the guiding principle for my writing.

### For Those Who Are New to the Book

For those of you who haven't used earlier editions, let me briefly describe where I see this book fitting in the panoply of top-selling books. Principles books are often categorized as old-style or new-style. I like to think of the flavor of this book as neither old- nor new-style, but instead cutting-edge style. Much of the conceptual foundations for the theory underlying it are derived from the new work in behavioral economics, nonlinear dynamics, complexity, and strategic game theory.

### The Cutting-Edge Style

Within this cutting-edge style work, everything is less certain than in either the new- or the old-style theory. The cutting-edge style sees economic theory taking us only so far in answering policy questions about whether or not the government should intervene in the economy. At the cutting edge of modern theory, no side is totally right or totally wrong in the ongoing policy debates. It's that ongoing debate about policy that makes economics so interesting to me.

## The Colloquial Style

Another way in which principles books are classified is on the easy-medium-difficult spectrum. This book is definitely in the medium range. Based on writing style alone, it would probably be placed in the easy range, but since it tackles difficult conceptual topics that will challenge even the brightest students, it should be considered a mediumrange text. Why do I choose that combination? Because I believe that most students have the ability to understand economic concepts even though on exams it often appears as if they have serious problems. In my opinion many of those problems are not conceptual; rather, they are problems in motivation, reading, and math. The economics found in principles courses is not students' highest priority; it certainly wasn't mine when I was 18. I'm continually amazed at how many supposedly not-so-good students are conceptually bright. The reality is that most principles books bore this MTV generation. To teach them effectively, we've got to get their attention and hold it.

One way I try to get students' attention is to use a colloquial style. The book talks to students and makes them feel that the textbook is a second teacher who is urging them on to study harder, and trying to explain the material to them. That colloquial style helps with one of the biggest problems in the course—getting students to read the book. Some professors don't always like the style, but even some of them have written to me to say that they use the book anyway because their students read it. And if the students have read the book, teaching is more rewarding.

### A Focus on Policy

Another way the book relates to students is through its focus on policy. This book is not written for future economics majors. Most students aren't going to go on in economics. It is written for students who will probably take only one or two economics courses in their lifetime. These students are interested in policy, so I present the basics of economic reasoning as it relates to policy questions. This discussion presents policy as students see it in the news: policy questions are seldom clear-cut; a book that presents policy any other way is unfair to students.

## Institutions and History

This book also differs from some of the others in that it emphasizes the importance of institutions and history. Modern work in game theory and strategic decision making is making it clear that the implications of economic reasoning depend on the institutional setting. To understand economics requires an understanding of existing institutions and the historical development of those institutions. In a principles course, while we don't have time to present much about history and institutions, we can at least let students know that these issues are important. And that's what I try to do.

# **Openness to Various Views**

While I present standard economics in the book, I present it in such a way that it is open to many different points of view. Thus, the book doesn't present the material as "the truth" but simply as the conventional wisdom, the learning of which is a useful hurdle for all students to jump over. To encourage students to question conventional wisdom, in this edition I've added a new set of questions at the end of each chapter—Questions from Alternative Perspectives—which includes questions written by economists from a variety of different perspectives. These include Post-Keynesian, feminist, Austrian, Radical, Institutionalist, and religious questions. The radical questions come from the Dollars and Sense Collective, a group with

- Chapter 6 (Describing Supply and Demand: Elasticities): I added a new example of elasticities, a new question for thought and review, and six new problems and exercises.
- Chapter 7 (Taxation and Government Intervention): I added a discussion of how to calculate consumer surplus and dead weight losses from a graph with straight-line demand and supply curves, along with a new question for thought and review and five new problems and exercises.
- Chapter 8 (The Logic of Individual Choice: The Foundation of Supply and Demand): I integrated the boxed discussion on psychology and economics into the text and expanded the discussion to include new work that goes beyond the standard utility-maximizing approach. I added a discussion of the ultimatum game and the status quo bias. I also added a new question for thought and review and two new problems and exercises.
- Chapter 9 (Production and Cost Analysis I): I added a new problem and exercise.
- Chapter 10 (Production and Cost Analysis II): I added depreciation as a key term and three new problems and exercises.
- Chapter 11 (Perfect Competition): I cut the box "The Broader Importance of the MR = MC Equilibrium Condition" and added four new problems and exercises.
- Chapter 12 (Monopoly): I updated the discussion of AIDS drugs and added a new question for thought and review, along with two new problems and exercises.
- Chapter 13 (Monopolistic Competition, Oligopoly, and Strategic Pricing): I added two new problems and exercises and a new Web question.
- Chapter 14 (Real-World Competition and Technology): I added a discussion of Google's IPO along with three new questions for thought and review and four new problems and exercises.
- Chapter 15 (Antitrust Policy and Regulation): I updated the discussion of AT&T's evolution. I also discuss the Voice over Internet Protocol as an emerging technology that will compete with existing technology used by current long-distance carriers. I also updated the discussion of Microsoft to include changing dimensions of the market and the rising importance of European antitrust policy. I also added two new Web questions.
- Chapter 16 (Work and the Labor Market): I added a new box, "Other Factors of Production," that briefly discusses land and capital as factors of production other than labor. I updated and modified tables and graphs and incorporated the box "Difficulties in Determining Marginal Productivities" into the text. I also added two new questions for thought and review and nine new problems and exercises.

- Chapter 17 (Who Gets What? The Distribution of Income): I added a discussion of how technology has played a role in increasing income inequality, along with a new problem and exercise.
- Chapter 18 (Government Policy and Market Failures): I added a section entitled "Excludability and the Costs of Pricing" that explains Paul Romer's division of goods by degree of rivalry in consumption and degree of excludability. I expanded the discussion of informational problems to include signaling issues and how informational markets can partially resolve information problems. I added four new questions for thought and review, a new problem and exercise, and a new Web question.
- Chapter 19 (Politics and Economics: The Case of Agricultural Markets): I added a new question for thought and review, a new problem and exercise, and a new Web question.
- Chapter 20 (Microeconomic Policy, Economic Reasoning, and Beyond): I added three new problems and exercises.
- Chapter 21 (International Trade Policy, Comparative Advantage, and Outsourcing): This chapter has significant changes. I incorporated the appendix into the chapter so that it includes a graphical presentation of comparative advantage. I've also added a discussion of outsourcing and the U.S. economy and explained how the outsourcing debate integrates into the theory of comparative advantage, and how the next decade will likely play out in our trade relations. To do this I introduced two new terms, inherent sources of comparative advantage and transferable sources of comparative advantage. Finally, I incorporated the new discussion into the text with six new questions for thought and review and five new problems and exercises.

### A Final Comment

A number of my friends keep asking me why I spend so much thought and time on what goes into the book. The answer is that I care about teaching economic ideas, which I think is the most important job that society has assigned to academic economists. Research is nice, but good teaching is priceless, and if the writing and the ideas in this book contribute to good teaching, then I'm happy. As I get older, I find that I'm happier with less grandiose goals, and to have turned a few students on to economics seems like a worthwhile legacy.

### **Ancillaries**

All reviewers agreed that the fifth edition's ancillaries were top rate. We have continued to work hard to maintain that level of excellence in this sixth edition.

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whom I've worked to coordinate their Readers (www.dollarsandsense.org/bookstore.html) with this text. I also often integrate Austrian ideas into my class; I find that The Free Market (www.mises.org/freemarket.asp) is a provocative resource. I often pair an article in The Free Market with one in Dollars and Sense in my assignments to students for supplementary reading. Having students read both Radical and Austrian views and then contrasting those views with their own, generally middle-of-the-road, views is, for me, a perfect way of teaching the principles course. (If I have radicals and libertarians in the class, I argue in favor of middle-of-the-road views.) If you like to teach the course emphasizing alternative views, you might want to assign the brief survey of different approaches to economics in the "Preface for the Student" close to the beginning of the course, and then have the students answer, or at least discuss, the alternative perspective questions at the end of each chapter.

# For Those Who Have Used the Book Before

Those of you who have used earlier editions will find that this sixth edition has the same basic structure and tone as the fifth. The reason is that the book has reached an equilibrium—I made the book consistent with the standard presentations, but I also have kept enough of the historical and institutional approaches, and enough of the informal, student-friendly writing style, to make the book distinctive. I guess the process of reviewing and rewriting does finally lead to something like a steady-state equilibrium.

This is not the book I would have written for myself (my perspective often strays from conventional wisdom), but it is a book that I'm proud of, and one that reflects my views given the constraints of the market. Since optimizing subject to constraints is a central lesson of economics, it's not surprising that I would take that approach in writing this book.

Still, I want students to question everything and understand that economics is far more than what is presented in a textbook. Thus, I continually search for ways to challenge them to question. One of my latest attempts is to put together a book of essays that explores what we economists teach and why we teach it. The book is called *The Stories Economists Tell*. You can find the introductory essay to that book on the book's Web site (www.mhhe.com/economics/colander6). If you are considering using my textbook for your class and want to know more about my views on teaching economics, you can get a free copy of the book by contacting your McGraw-Hill representative.

### **Changes from the Last Edition**

Although the structure of the chapters did not change significantly, the revision is substantial. The largest set of changes involves a significant increase in the coverage of global issues, especially as they relate to outsourcing. Students are thinking about these issues, and I felt that they should be dealt with fully. Thus, Chapters 2, 3, and 21 have more coverage of global issues.

I added new end-of-chapter questions and problems and exercises and also updated facts, figures, and discussions to keep the book as up-to-date and relevant as possible. The economy and economics are constantly evolving, which means that the texts must change to reflect the changing institutions and events, presentation of data, and evolving thinking of the profession. To make room for the new questions, I removed the answers to even-numbered questions from the text and placed them on the Web site and in the Study Guide.

The final major change is the addition of alternative perspective questions to each chapter. These are designed to encourage the student to think more deeply about issues than do the standard questions, and to introduce a broader pluralism into the teaching of the standard material.

## Changes by Chapter<sup>1</sup>

- Chapter 1 (Economics and Economic Reasoning): I updated the chapter and added four new questions for thought and review and six new problems and exercises.
- Chapter 2 (Trade, Trade-Offs, and Government Policy): I simplified the graphical presentation of comparative advantage and added a discussion of how outsourcing is part of a global process guided by the law of one price, with specific reference to the situation in the United States.
- Chapter 3 (The Evolving U.S. Economy in Perspective): I added a new section on "Globalization and the Law of One Price" that continues the discussion begun in Chapter 2 about outsourcing by introducing the concept of convergence.
- Chapter 4 (Supply and Demand): The chapter is updated with new examples, two new questions for thought and review, and four new problems and exercises.
- Chapter 5 (Using Supply and Demand): The chapter has been updated for the changing price of the euro. I added three new questions for thought and review and seven new problems and exercises.

<sup>&</sup>lt;sup>1</sup>A more in-depth discussion of the changes can be found on the professor's portion of the book's Web site (www.mhhe.com/economics/colander6).

### **Study Guide**

This guide—written by myself, Douglas Copeland of Johnson County Community College, and Jenifer Gamber—reviews the main concepts from each chapter and applies those concepts in a variety of ways: short-answer questions, matching terms with definitions, problems and applications, a brainteaser, multiple-choice questions, and potential essay questions. Since students learn best not by just knowing the right answer but by understanding how to get there, each answer comes with an explanation. Student will also find the answers to the even-numbered end-of-chapter questions. Timed cumulative pretests help students prepare for exams.

#### Instructor's Manual

In the sixth edition, Tom Adams of Sacramento City College continues to maintain the high standard set in previous editions. Class preparation is easier than ever. "Chapter Overview" and "What's New" provide a quick review of each chapter. "What's New" will be invaluable when modifying lecture notes to fit the new edition. The manual provides you with comprehensive lecture outlines, but it also offers help for inevitable classroom trouble spots. "Discussion Starters" will help engage students and keep them thinking. "Tips for Teaching Large Sections," written by Gail Hoyt of the University of Kentucky for micro, offers innovative ideas for teaching very large classes. "Student Stumbling Blocks" provides additional explanations or examples that help clarify difficult concepts. "Ties to the Tools" helps bring those text boxes into the classroom; a comprehensive list of relevant URLs brings the Internet in, too. Every chapter's 10-question "Pop Quiz" will help students prepare for exams. The "Case Studies" provide contemporary, real-world economic examples. The entire instructor's manual is available in print, on the Instructor's Resource CD-ROM, and on the Colander Web site.

### **Test Banks**

Robert Schenk of Saint Joseph's College of Indiana with the help of James DeVault of Lafayette College and Susan Dadres of Southern Methodist University revised Test Banks A and B (the 10,500-question multiple-choice test banks). Each question is categorized by chapter learning objective; level of difficulty (easy, medium, hard); skill being tested (recall, comprehension, application); and type of question (word problem, calculation, graph). Approximately 20 percent of the questions are new or revised. In addition, James Chasey has tagged the questions that are best suited for a high school AP course.

Questions were reviewed by professors and each new question was reviewed by Jenifer Gamber and myself for accuracy, clarity, and consistency with the textbook. They are available in print form and in the EZ Test electronic test-generating system on the Instructor's Resource CD-ROM.

Test Bank C, revised by Dave Horlacher of Middlebury College, now consists of approximately 600 short-answer questions, essay questions, and graphical and mathematical problems. Questions vary in level of difficulty and type of skill being tested. Test Bank C is available in print and on the Instructor's Resource CD-ROM.

### **Problem Sets**

Thomas Swanke of Chadron State College and John Blair and Carole Endres of Wright State University have written a Student Problem Set, a new ancillary with this edition. Each chapter has its own set of 7–10 problems that professors can assign for class. Problem sets give students the opportunity to work with the numbers, formulas, and graphs in the textbook. Most of the problems require working with numbers and graphs, but they also emphasize thinking by the students. These problems emphasize the core concepts in each chapter and provide further preparation for quizzes and tests. An answer key for the problem sets is available for professors on the book's Web site.

### DiscoverEcon with Paul Solman Videos

A video and software program, the DiscoverEcon student online tutorial, accessible at www.discoverecon.com/ colander6, is available with every new copy of the sixth edition text. Developed by Gerald C. Nelson of the University of Illinois at Urbana-Champaign, this fully updated and enhanced version of DiscoverEcon with Paul Solman Videos features new learning opportunities for students and easy integration into existing courses for the instructor. The syllabus development tool allows instructors to create interactive syllabi by linking DiscoverEcon exercises, special Web sites, and Solman Videos to their class syllabus. Students can submit exercise results directly to their professor using the e-submission function. DiscoverEcon provides professors with easy-to-use course management options and pedagogically sound, self-grading exercises for homework assignments.

The software acts like an interactive text; software chapters parallel text chapters and software pages include specific page references to the text. All DiscoverEcon chapters contain a multiple-choice quiz, discussion questions with online links, and match-the-terms exercises. Interactive graphs, animated charts, and live tables let students manipulate variables and study the outcomes. The program provides links to videos created by Paul Solman of *The NewsHour with Jim Lehrer*. This video component consists of more than 30 short video segments. Each 5- to 10-minute video explains a key economic idea such as economic growth, elasticity, and production possibilities in a memorable accessible way.

Access to DiscoverEcon with Paul Solman Videos is accessible online, via a password code card available with each new text.

### **PowerPoint Presentation**

Doris Bennett of Jacksonville State University has prepared an extensive slide program that includes all text exhibits and key concepts. It is available on the Instructor's Resource CD-ROM and on our Web site.

### **Overhead Transparencies**

We offer all key text exhibits in full-color acetate form for use with overhead projectors.

### **Economics Web Newsletter**

This electronic newsletter contains 10 questions related to current economic events that can be used as an in-class quiz and reprints one recent *Wall Street Journal* article along with 5 in-depth questions (and answers) that are tied to specific text chapters. Seven new exercises are added each semester.

### Classic Readings in Economics

This collection includes selections from the writings of economists, such as Smith, Marx, Hayek, and Veblen, who have raised questions that changed the direction of economic thinking. This material is especially useful for courses that stress the importance of economic ideas.

### **Dollars and Sense Readers**

While not directly an ancillary to the book, the *Dollars and Sense* readers are annotated to fit with chapters of this book for professors who want to supplement the text with a radical perspective. This book can be ordered as a package with this book. Just contact your McGraw-Hill representative.

# **Economics: An Honors Companion**

The Honors Companion presents mathematical techniques that underlie numerous basic economic concepts. It presupposes a solid student background in algebra and geometry and some familiarity with basic calculus, thereby giving Microeconomics, Sixth Edition, flexibility for use in more rigorous classes.

# Package Pricing

To help lower costs of using ancillaries, McGraw-Hill has developed a variety of separate packages in which the book can be bought together with the ancillaries for a price that is close to the price of the book alone. Each of these packages has a separate ISBN number. For information on these packages contact your McGraw-Hill sales representative, or Marty Quinn at martin\_quinn@mcgraw-hill.com.

# **More Questions from Alternative Perspectives**

As I said above, I am happy to be including questions from alternative perspectives in this edition. I, together with a

group of economists from a variety of alternative perspectives, will be working on expanding this feature into a full-length book over the next couple of years. The hope is to include as many different perspectives as possible. I've already recruited a number of contributors from a variety of perspectives—Radical, Austrian, feminist, Institutionalist, and Post-Keynesians, and contributions from religious-oriented economists. As we develop this feature, I hope to expand this group considerably, so that we have a truly pluralistic selection of questions. As these questions are developed and refined, we will post them on the book Web site. If you would like to contribute to these alternative perspectives questions, contact me (Colander@ Middlebury.edu) with some suggestions. The ideal questions for this section are tied to the material in the chapter but designed to get the student to look at the material from a slightly different perspective.

## www.mhhe.com/economics/colander6

The Online Learning Center to accompany Colander's sixth edition is a Web site full of exciting new content that follows the text chapter by chapter. Students and instructors alike will find a wealth of new online resources.

For the Student Center, Douglas Copeland of Johnson County Community College has prepared chapter-level study aids, including Chapter Introductions, Tutorials (3–5 problems per chapter using interactive graphing applets), and Practice Exercises (3–5 problems per chapter, with answers). Students can test their knowledge of the chapter's concepts with a multiple-choice Pre-Test and Post-Test, plus Learning Objectives, end-of-chapter Web Questions, Web Newsletters, a section called Writing about Economics, Flashcards, the Glossary and Colloquial Glossary, and answers to even-numbered end-of-chapter questions.

Kit Taylor of Bellevue Community College has updated the Web Notes from the book; this feature extends the text discussion onto the Web. Web Notes are flagged in the margin and links are on the book's Web site. In addition, a *New York Times* Web feed presents students with economics-related news headlines.

On the book's Web site, instructors will find downloadable PowerPoints, the Instructor's Manual, Sample Syllabi, a link to Dave Colander's own Web site, and Help for AP Courses. The entire Web site content also can be delivered through PageOut or within a course management system (i.e., WebCT or Blackboard).

# People to Thank

A book this size is not the work of a single person, despite the fact that only one is listed as author. So many people have contributed so much to this book that it is hard to know where to begin thanking them. But I must begin somewhere, so let me begin by thanking the sixth edition reviewers, whose insightful comments kept me on track.

Syed Ahmed Cameron University Norman Aitken University of Massachusetts

Khalid Al-Hmoud Texas Tech University

Louis H. Amato University of North Carolina–Charlotte

Ayman Amer Mt. Mercy College

Laura M. Argys University of Colorado-Denver

Mohsen Bahmani-Oskoee University of Wisconsin-

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Marc Fox Brooklyn College

Mark Funk University of Arkansas—

Little Rock

Terrel Gallaway Southwest Missouri State

University
Gary Galles

Pepperdine University

J. Robert Gillette University of Kentucky–

Lexington

Lance Girton
University of Utah
Iohn Gonzales

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Edward Gullason Dowling College

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Nathan Hampton St. Cloud State University

Igal Hendel

University of Wisconsin

James Henderson Baylor University

Rick Hirschi Brigham Young University–Idaho

Jim Horner Cameron University Andy Howard Rio Hondo College

Jim Hubert

Seattle Central Community

College

Yongil Jeon

Central Michigan University

Marianne Johnson University of Wisconsin–

Oshkosh

Prathibha Joshi Gordon College

Veronica Z. Kalich Baldwin-Wallace College

Bryce Kanago

University of Northern Iowa

Jonathan D. Kaplan California State University–Sacramento

Louise Keely

University of Wisconsin

Elizabeth Sawyer Kelly University of Wisconsin

Jong Kim Emory University

R. E. Kingery

Hawkeye Community College

Morris Knapp Miami Dade College

Tolga Koker Hamilton College Steven Kreft

West Virginia University

Harry Kypraios Rollins College

Teresa L. C. Laughlin Palomar College

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West Virginia University

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Farrokh Nourzad Marquette University

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Dan Powroznik Chesapeake College

Quenton Pulliam Nashville State Tech Community College

Ali Rassuli

Indiana University-Purdue University Fort Wayne

Alannah Rosenberg Saddleback College

Robert Rosenman Washington State University-Pullman

Marina Rosser James Madison University Luz Saavedra University of St. Thomas

Hedayeh Samavati Indiana University-Purdue University Fort Wayne

George D. Santopietro Radford University

Amy Schmidt St. Anselm College

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Sumati Srinivas

Central Michigan University

Laddie J. Sula Loras College

Thomas A. Swanke Chadron State College

David Tufte

Southern Utah University

Sachi Trivedi

Indiana State University

Theofanis Tsoulouhas North Carolina State University

Don Uy-Barreta University of California Santa Cruz Extension and

De Anza College Ashish Vaidya California State

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Li Wang Vassar College

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Kathryn Wilson Kent State University Willard Witte Indiana University– Bloomington

Krissa Wrigley Boise State University Sourushe Zandvakili University of Cincinnati

Stephen T. Ziliak Roosevelt University

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# Preface for the Student

This book is written for you, the student. It's meant to give you a sense of what economics is, how economists think, and how they approach policy problems. There's only so much that an introductory text can cover, so much is left out. That includes much of the subtlety of economic thinking. So if you have a problem swallowing some of the ideas, and you believe that there's more to the issue than is presented in the text, rest assured; generally you're right. Hard choices have to be made for pedagogical purposes—issues have to be simplified and presentations curtailed. Otherwise this would be a 1,600-page book and much too heavy to carry around in a backpack.

# Economics as a Method of Reasoning, Not the Truth

This book is what would be called mainstream (it presents the conventional wisdom of economists) both because I'm mainstream and because most economists are as well. But pedagogically, I also believe that students learn by questioning—to say, no, that's not right, that's not the way I see things, and then to compare their way of thinking with the conventional way. Despite my being mainstream, I'm by nature also a skeptic, and in terms of pedagogy often find myself in sympathy with Joan Robinson, a famous economist, who argued that "the purpose of studying economics is not to acquire a set of ready-made answers to economic ques-

tions, but to learn how to avoid being deceived by economists." So, to encourage questioning everything, I don't present models and insights of economists as the truth (the field of economics is far too complicated to have arrived at a single truth) but as a set of technical hurdles, reasoning processes, and arguments that students should know, and that will help prepare them to deal with economic issues. Economics primarily teaches you how to approach problems; it does not provide definitive answers about what is right and what is wrong. It is a method, not a set of truths.

# Alternative Perspectives in Economics

One of the pedagogical choices I made in writing the book was to concentrate almost exclusively on the mainstream view. I strongly believe that focusing on that view is the best way to teach the course. However, I also believe that students should be aware of the diversity in economics and know that the mainstream view is not the only view out there. In fact, there are probably as many views out there as there are economists. Still, for a majority of economists, the concepts presented in this book are an acceptable pedagogical simplification of the myriad views held by economists.

Some economists, however, don't find aspects of what is presented in this text to be an acceptable simplification. They wouldn't necessarily say that the presentation is wrong; they are more likely to see it as misleading, or as diverting the discussion away from other, more relevant, issues. These economists are generally called nonmainstream or heterodox economists. A heterodox economist is one who doesn't accept the basic underlying model used by a majority of economists as the most useful model for analyzing the economy.

In this preface I will briefly introduce six heterodox economic approaches to give you a sense of how their analyses differ from the mainstream analyses presented in this book. The six heterodox approaches are Austrian, Post-Keynesian, Institutionalist, Radical, feminist, and religious. Below are brief descriptions of each group, written with the help of the team of alternative-perspective economists.

### Austrian Economists

Austrian economists believe in methodological individualism, by which they mean that social goals are best met through voluntary, mutually beneficial, interactions. Lack of information and unsolvable incentive problems undermine the ability of government to plan, making the market the best method for coordinating economic activity. Austrian economists oppose state intrusion into private property and private activities. They are not all economists from Austria; rather, they are economists from anywhere who follow the ideas of Ludwig von Mises and Friedrich von Hayek, two economists who were from Austria.

Austrian economists are sometimes classified as conservative, but they are more appropriately classified as libertarians, who believe in liberty of individuals first and in other social goals second. Consistent with their views, they are often willing to support what are sometimes considered radical ideas, such as legalizing addictive drugs or eliminating our current monetary system—ideas that most mainstream economists would oppose. In macroeconomics, Austrian economists emphasize the uncertainty in the economy and the inability of a government controlled by self-interested politicians to undertake socially beneficial policy.

One proposal of Austrian economists will give you a flavor of their approach. That proposal is to eliminate the Federal Reserve System and to establish a free market in money—a policy that would leave people free to use any money they want and that would significantly reduce banking regulation. In a sense, their proposal carries the Classical argument in favor of laissez-faire to its logical conclusions. Why should the government have a monopoly of the money supply? Why shouldn't people be free to use whatever money they desire, denominated in whatever unit they want? Why don't we rely upon competition to prevent inflation? Why don't we have a free market in money? Well-known Austrian economists include Peter Boettke, Veronique de Rugy, Mario Rizzo, David Gordon, Israel Kirzner, Peter Leeson, Chris Coyne, Dan Klein, and Roger Koppl.

### Institutionalist Economists

Institutionalist economists argue that any economic analysis must involve specific considerations of institutions. The lineage of Institutionalist economics begins with the pioneering work of Thorstein Veblen, John R. Commons, and Wesley C. Mitchell. Veblen employed evolutionary analysis to explore the role of institutions in directing and retarding the economic process. He saw human behavior driven by cultural norms and conveyed the way in which they were with sardonic wit and penetrating insight, leaving us with enduring metaphors such as the leisure class and conspicuous consumption. Commons argued that institutions are social constructs that could improve general welfare. Accordingly, he established cooperative investigative programs to support pragmatic changes in the legal structure of government. Mitchell was a leader in developing economics as an empirical study; he was a keen observer of the business cycle and argued that theory must be informed by systematic attention to empirical data, or it was useless.

Contemporary Institutionalists employ the founder's "trilogy"—empirically informed evolutionary analysis directed toward pragmatic alteration of institutions shaping economic outcomes—in their policy approach. Examples include indicative planning—a macroeconomic policy in which the government sets up an overall plan for various industries and selectively directs credit to certain industries; and income support programs, including those assuring employment for all willing. Well-known Institutionalists include Greg Hayden, Geoff Hodgson, Anne Mayhew, James Peach, and Ronnie Phillips.

### **Radical Economists**

Radical economists believe substantial equality-preferring institutional changes should be implemented in our economic system. Radical economists evolved out of Marxian economics. In their analysis they focus on the lack of equity in our current economic system and on institutional changes that might bring about a more equitable system. Specifically, they see the current economic system as one in which a few people—capitalists and high-level managers—benefit enormously at the expense of many people who struggle to make ends meet in jobs that are unfulfilling or who even go without work at times. They see the fundamental instability and irrationality of the capitalist system at the root of a wide array of social ills that range from pervasive inequality to alienation to racism, sexism, and imperialism. Radical economists often use a classoriented analysis to address these issues and are much more willing to talk about social conflict and tensions in our society than are mainstream economists.

A policy favored by many Radicals is the establishment of worker cooperatives to replace the corporation. Radicals argue that such worker cooperatives would see

that the income of the firm was more equitably allocated. Likewise, Radical theorists endorse policies such as universal health care insurance that conform to the ethic of "putting people before profits."

There are a number of centers of Radical thought, including The Political Economy Research Institute, The New School for Social Research, and some campuses of the University of Massachusetts. A good place to find Radical views is the *Dollars & Sense* magazine. Well-known Radical economists include Lourdes Beneria, Sam Bowles, Arthur MacEwan, Robert Pollin, Gerald Epstein, Anwar Shaik, Michael Reich, Richard Wolff, and Stephen Resnick, as well as a number of feminist economists who would be considered both Radicals and feminists.

### **Feminist Economists**

Feminist economics offers a substantive challenge to the content, scope, and methodology of mainstream economics. Feminist economists question the boundaries of what we consider economics to be and examine social arrangements surrounding provisioning. Feminist economists have many different views, but all believe that in some way traditional economic analysis misses many important issues pertaining to women.

Feminist economists study issues such as how the institutional structure tends to direct women into certain types of jobs (generally low-paying jobs) and away from other types of jobs (generally high-paying jobs). They draw our attention to the unpaid labor performed by women throughout the world and ask "What would GDP look like if women's work were given a value and included?" They argue for an expansion in the content of economics to include "women as practitioners and as objects of study" and for the elimination of the masculine bias in mainstream economics. Is there such a bias? To see it, simply look at your class and compare the relative number of women to the relative number of women at your school. It is highly likely that your class has relatively more men. Feminist economists want you to ask why that is, and whether anything should be done about it.

The historical roots of feminist economics can be found in the work of such authors as Mary Wollstonecraft, John Stuart Mill, Harriet Taylor Mill, and Charlotte Perkins Gilman. Feminist economics has expanded significantly in the past 15 years and has emerged as an influential body of thought. Well-known feminist economists include Myra Strober, Diana Strassmann, Amartya Sen, Barbara Bergmann, Julie Nelson, Jane Humphries, Marianne Ferber, Randy Albelda, Nancy Folbre, and Heidi Hartmann.

# **Religious Economists**

Religion is the oldest and, arguably, the most influential institution in the world—be it Christianity, Islam, Judaism,

Buddhism, Hinduism, or any of the many other religions in the world. Modern science, of which economics is a part, emphasizes the rational elements of thought. It attempts to separate faith and normative issues from rational analysis in ways that some religiously oriented economists find questionable. The line between a religious and non-religious economist is not hard and fast; all economists bring elements of their ethical considerations into their analysis. But those we call "religious economists" integrate the ethical and normative issues into economic analysis in more complex ways than the ways presented in the text.

Religiously oriented economists have a diversity of views; some believe that their views can be integrated reasonably well into standard economics, while others see the need for the development of a distinctive faith-based methodology that focuses on a particular group of normative concerns centered on issues such as human dignity and caring for the poor.

One religious perspective that is represented by a defined group in the U.S. economics profession is Christianity, and a number of Christian economists have joined together in the Association of Christian Economists (ACE). Its stated goal is "to encourage Christian scholars to explore and communicate the relationship between their faith and the discipline of economics, and to promote interaction and communication among Christian economists." Centers of ACE are Pepperdine University, Calvin College, and Gordon College. Leading Christian economists include Kurt Schaefer, Andrew Yuengert, and Stephen Smith.

Many of the religious alternative perspective questions that we provide in the text are from the Judeo-Christian perspective, the perspective most familiar to U.S. students. However, we intersperse some questions from other religious perspectives, both to show the similarity of views and to encourage students to think in a multicultural framework.

### **Post-Keynesian Economists**

Post-Keynesian economists believe that uncertainty is a central issue in economics. They follow J. M. Keynes's approach more so than do mainstream economists in emphasizing institutional imperfections in the economy and the importance of fundamental uncertainty that rationality cannot deal with. They agree with Institutionalists that the study of economics must emphasize and incorporate the importance of social and political structure in determining market outcomes.

While their view about the importance of uncertainty is similar to the Austrian view, their policy response to that uncertainty is quite different. They do not see uncertainty as eliminating much of government's role in the economy; instead, they see it leading to policies in which government takes a larger role in guiding the economy.

One of their policy proposals that gives you a flavor of their approach is tax-based income policies—policies in which the government tries to directly affect the nominal wage- and price-setting institutions. Under a tax-based income policy, any firm raising its wage or price would be subject to a tax, and any firm lowering its wage or price would get a subsidy. Such a plan, they argue, would reduce the upward pressure on the nominal price level and reduce the rate of unemployment necessary to hold down inflation. Well-known Post-Keynesian economists include Paul Davidson, Jamie Galbraith, Barkley Rosser, John Cornwall, Shelia Dow, Malcolm Sawyer, Philip Arestis, Victoria Chick, Jan Kregel, and Geof Harcourt.

# Consistency of the Various Approaches

A characteristic of almost all heterodox economists of all types is that their analyses tend to be less formal than mainstream analysis. Less formal doesn't mean better or worse. There are advantages and disadvantages to formality, but less formal does mean that there's more potential for ambiguity in interpretation. It's easy to say whether the logic in a formal model is right or wrong. It's much harder to say whether the logic in an informal model is right or wrong because it's often hard to see precisely what the logic is. The advantage of an informal model is that it can include many more variables and can be made more realistic, so you can discuss real-world problems more easily with that model. Nonmainstream economists often want to talk about the real world, which is why they use informal models.

Often, after I discuss the mainstream and heterodox approaches, some student asks which is right. I respond with a story told by a former colleague of mine, Abba Lerner:

"But look," the rabbi's wife remonstrated, "when one party to the dispute presented their case to you, you said, 'You are quite right,' and then when the other party presented their case you again said, 'You are quite right.' Surely they cannot both be right?" To which the Rabbi answered, "My dear, you are quite right!"

The moral of the story is that there's nothing necessarily inconsistent among mainstream and heterodox economists' approaches. Their approaches are simply different ways of looking at the same event. Which approach is most useful depends on what issues and events you are analyzing. The class analysis used by radicals is often more appropriate to developing countries than it is to the United States, and, in analyzing developing countries, many mainstream economists also include class fights in their approach. Similarly, Austrian analysis provides more insight into the role of the entrepreneur and individual in the economy than does mainstream analysis, while Post-

Keynesian and Institutionalist analyses are useful when considering major institutional changes.

The distinctions between heterodox and mainstream economists can be overdone. One economist may well fall into two or three different groupings and use a combination of various analyses.

I follow the work of heterodox economists carefully. Their writing is often more interesting than mainstream writing, which can often get rather technical and boring. But in this book, I present primarily mainstream views. I do that because that's what I see as the job of the principles of economics course. My goal, however, is to present those views to you, not to indoctrinate you with those views, and throughout the text I include some challenges to the standard views. At the end of each chapter I also include some questions that challenge the view presented in the chapter. These questions are written by representatives of different heterodox groups. I also encourage you to look for these other views in your outside reading. The Dollars and Sense supplement to the book has radical critiques and Free Market, an Austrian newsletter found at www.mises.org/freemarket.asp, has Austrian critiques. There are many other sources and Web sites for heterodox groups. Exploring these sites, and learning about the many different views that are competing in the market-place for ideas, make your economics course more interesting.

# A Concluding Thought

There are many ways to explore economics, and in your exploration, the textbook is only a map. You and your professor determine what you discuss and learn and what path you will take. Ultimately, that's the way it has to be. Most of you are in this course for the grade—college is a way of progressing up the ladder. That's how it was for me. But the process also can be transforming; it can change how you look at issues, how you think, and who you are. The economics courses I took were especially important in determining who I have become.

Much of the principles course is what I call hurdle jumping—calisthenics of the mind. It is a set of strengthening exercises. Separately, each is not especially relevant, but combined, they help turn your weak cranial muscle into a strong muscle better able to handle the problems that life throws at you. So, do the work, even if it seems boring; follow your professor's reasoning, even if you don't agree with what he or she is arguing; and keep thinking. Read newspapers and try to apply the lessons, deciding when they apply and when they don't. But in the process be happy—enjoy the moment, because that moment will never be again.

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