# MACROECONOMICS

Second Edition



DAVID C. COLANDER

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DAVID C. COLANDER

Middlebury College

#### IRWIN

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

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# **Preface**

One of the first lessons of writing is: Know for whom you are writing. This book is written for students; this preface, however, is written for professors. Why? The answer is simple—the students for whom this book is written don't read prefaces; they don't read anything in a textbook unless it is assigned (and sometimes they don't read that). Their interests lie in the real world, not in texts. The style and structure of the body of this text is made to turn on such students, as much as they can be turned on, to economic ideas. Alas, I recognize that I will fail with many, but I sincerely believe that my success rate of actually getting students to read this textbook will likely be higher than will be the success rate for other economic textbooks written in standard professorial style.

I also recognize that students will never get a chance to read this text unless the professor chooses the book, which is why I write this preface for professors—they read prefaces. (If you're one of those rare students who read textbook prefaces, read on; it will give you a sense of what will be coming in the course.)

I'm pleased to say that the first edition of this book was very well received. As Sally Field would say, "They like me!" Since this second edition keeps most of the distinctive components and style of the first edition, the preface I wrote for that first edition remains directly relevant. So let me begin this preface with the key elements of that first edition preface.

### Excerpts from Preface to the First Edition

Why write a new introductory economics textbook? Since I am an economist, the answer must be that the expected benefits outweighed the expected costs. But that doesn't mean I had my bank balance in mind when I decided to write this book. Quite honestly, there are easier ways of earning money (my wife's a doctor). There had to be some other benefits out there. For me, those other benefits had to do with a belief about how economics should be taught—what was important and what was not.

Before I started writing this book I had done quite a bit of research on economic education. As part of that research, Arjo Klamer and I had surveyed and interviewed graduate students in a number of top graduate programs. Two of the most disturbing things we discovered were that economic institutions and economic literature were being given short shrift in graduate economics education. For example, in response to the question, "How important is a knowledge of economic literature to being successful as an economist?" only 10 percent of the

students responded that it was very important, while 43 percent said it was unimportant. In response to the question, "How important to achieving success as an economist is having a thorough knowledge of the economy?" only 3 percent said it was very important, while 68 percent said it was unimportant.

I believe that the majority of the profession is concerned with these results. Certainly the students we interviewed were concerned. They said they believed that institutions and literature were very important. Their survey responses simply indicated their perception of how people succeed in the profession, but the current situation was not the way it should be. Almost all economists I know believe that students need to know economic literature and have a thorough knowledge of the institutions. Without the appropriate background knowledge of institutions and literature, all the technical skills in the world aren't going to provide one with the economic sensibility necessary to understand what's going on in the economy or to decide whether or not a model is relevant.

As I thought about these results and considered my own teaching, I realized that the problem was not only in graduate schools; it had filtered down to undergraduate texts. As I looked through the texts, I saw excellent discussions of technical issues and of models, but little discussion of economic sensibility. These books didn't even try to provide the intellectual context within which those models developed or the institutional context to which these models were to be applied. The standard texts had settled into teaching technique for the sake of technique and had shifted away from teaching economic sensibility.

I decided that if I were serious about playing a role in reinstituting economic sensibility and a knowledge of institutions and literature in economic education, I would have to write an introductory textbook that did that. I took it as a challenge. Meeting that challenge was what drove me to write this book; it is what kept me going when all my rational instincts told me it was too much time and too much work.

### Teaching Economic Sensibility

The question I faced was: How do you incorporate economic sensibility into a textbook? Economic sensibility is more than a knowledge of modeling techniques; it is a mindset in which one's lens of the world is a latticework of ascending cost/benefit frameworks in which one is deciding on the optimal degree of rationality. Economic sensibility is an enforced reasonableness that provides insight into complicated issues; it is a

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perspective, not a technique. The argument I heard in favor of teaching technique was that economic sensibility could not be taught. I reject that argument. Economic sensibility may be hard to teach because it does not come naturally for most people, but it can and must be taught. The question is: How do you teach it? The answer I came to: Enthusiastically.

#### Economics with Passion

I am first and foremost an economics teacher; I am excited by economics. I find economic ideas relevant, challenging, and exciting. In my lectures, I try to convey that excitement, and if the lecture is going right, I can feel the excitement in my students. Then off they go to read the text. All too often when they return to class, the fire in their eyes is gone; the textbook has lulled them into complacency. Those who know me know that I can put up with many things (not quietly, but nonetheless put up with), but one of those things isn't complacency. I want students to think, to argue, to challenge, to get passionate about the ideas. I encourage this reaction from students not just because economists' ideas deserve to be treated passionately, but also because, through a combination of passion and reason, eventually students achieve economic sensibility. I decided what was missing from most textbooks was the passion. I promised myself my book would retain the passion.

Now there's no way I'm going to get passionate about Slutsky equations, phase diagrams, indifference curves, or an AS/AD model. Mathematicians may get passionate about such things, I don't. I do get passionate about the insight economics gives one into the problems we, as individuals and as society, must face: the budget deficit, TANSTAAFL, the environment, and agricultural subsidies. If the techniques help in understanding the ideas, fine, but if they don't, goodbye to the techniques.

#### Passion without Bias

While not all textbooks are written by passionless people, the conventional wisdom is that authors should hide their passion to make their books more marketable. In some ways this makes sense—often passion and ideological bias go together. Many economists' passions are ideologically linked, and if you remove the ideology, you remove the passion. Good economic sensibility cannot be—and cannot even appear to be—biased; if passion is purged in maintaining neutrality, it is purged for a good cause.

But passion and ideological bias need not go together. I believe it is possible for a passionate textbook to be reasonably objective and unbiased. And I set out to write a book that would be as unbiased as possible (but not more so) and to do so without masking my passion for economic ideas. Various techniques allow me to do this. For example, to keep the students interested in the ideas rather than focusing on technique, I present some ideas in a debate format with two passionate believers on both sides arguing the points. The debate format makes the arguments come alive; they are no longer technical issues that must be memorized; they are passionate ideas, and as the students get caught up in the debate, they think about the ideas much more deeply than they otherwise would.

#### A Conversational Tone

To transmit that sense of passion to the students, I needed a writing style that allowed it to come through. Quite honestly,

textbookese douses passion faster than a cold shower. So this book is not written in textbookese. It's written in conversational English—I'm talking to the students. When they read the book, they will know me; they may not like me like my mother likes me, but they will know me.

The conversational tone is not a monotone; it ebbs and flows depending on the nature of the material. Sometimes, in the analytic parts, the style approaches textbookese; the important technical aspects of economics require technical writing. When we hit those parts, I tell the students and encourage them to stick with me. But, even here I try to provide intuitive explanations that students can relate to.

The use of conversational style has two effects. First, it eliminates the sense some students have that textbooks provide the "truth." When the textbook author is a real person with peccadilloes and warts, the students won't accept what he or she says unless it makes sense to them. Approaching a textbook with a Missouri "show me" attitude stimulates true learning. Second, the conversational style keeps the students awake. If students' heads are nodding as they read a chapter, they're not learning. Now I know this book is not *Catcher in the Rye;* it's a textbook conveying sometimes complex ideas. But the excitement about economic ideas and the real world comes through.

The approach I take allows me to deal simply with complicated ideas. For example, in the book I discuss modern interpretations of Keynesian and Classical economics, real business cycles, strategic pricing, the theory of the second best, rentseeking, Pareto optimality, and challenges to Pareto optimality. The conversational style conveys the essence of these complex topics to students in a nontechnical fashion without tying the students' brains up in technical tourniquets. The style allows me to relate the ideas to concrete examples rather than mathematical formulas, providing intuitive discussions of the ideas that capture the economic sensibility.

#### Models in Historical and Institutional Context

Discussing only the minimum of techniques necessary for the students to understand the ideas allows me more leeway to get into, and discuss, institutional and historical issues as they relate to current policy. Models without context are meaningless, and thus you'll find more historical and institutional issues in this book than in other principles books. The book has numerous maps; the discussion conveys the sense that geography, history, and psychology are important, even though it touches on them only tangentially.

One of the ways in which this historical and institutional approach shows up is in the complete coverage of the changing nature of economic systems. Socialism is undergoing enormous changes, and students are interested in what is happening and why it is happening. Their questions cannot be answered with technical models, but they can be discussed informally in a historical context. And that's what this book does.

#### The Invisible Forces

I've incorporated in the book a pedagogical device I've found useful where I want to include the social and political forces that affect reality. That device is to convey to students a picture of reality being controlled not only by the invisible hand, but also by the invisible foot (politics) and the invisible handshake (social and cultural forces). This *invisible forces* imagery lets

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me relate economists' abstract models to the real world; it allows me to discuss the real-world interface between economics, politics, and social forces. What makes this device effective is that students can picture these three invisible forces fighting each other to direct real world events; that image allows them to put economic models into perspective.

# Some Short Prefatory Comments on the Second Edition

A question the reader might have, and one that I asked myself long and hard, is: "If the first edition was so good, why write a second edition?" One reason I updated the book had to do with money—a reason which isn't discussed in polite prefaces, even those written by economists, so I won't discuss it. A second reason is that it allowed significant improvement in the ancillary package, including two dear to my heart, a classic readings companion text, which lets students go beyond the text, and actually read economists such as Smith, Mill, Marx, Knight, Lerner, and Stigler, and an honors companion text, which presents technical material that would scare away less prepared students. These should help further the critical thought component of the book that is central to my philosophy of how economics should be taught.

A third, and probably the most important, reason for doing a second edition was reviewers' comments. Essentially the reviewers told me, "The first edition was a good first effort, but you can do better." Hearing those comments was initially a real downer; I felt a bit like many of my students feel after I've marked up a first draft of a paper that they hoped would be the final draft—deflated and depressed. But I remembered what I tell my students: "I criticize so that you can learn, so that you can make it better" and resolved to do better—to make the book clearer, more exciting, more dynamic, and more consistent with my overall philosophy than the first edition.

All reviewers agreed that my book was more than a repeat of the standard litany, that it covered the standard introductory material in a more open and accessible way than did other texts. It didn't present economics as a pretentious science, nor did it present economics as a touchy-feely subject. It presented it for what it is—an enormously powerful, but simultaneously potentially confusing and limited, engine of analysis that provides an interesting approach to understanding the problems of society. It was a straightforward presentation of economic ideas—warts and all. But they pointed out that I sometimes strayed from my goals in a number of ways. How did I stray? Let me count the ways.

The first way reviewers said I strayed was that I wasn't always true to my "math isn't necessary" view. So in this second edition I eliminated some algebra that scared some students.

Second, they said, "Add more policy discussion." So when doing the second edition I put a sign over my desk: "Policy is where it's at, Stupid—Policy," and, after being reminded by reviewers a few times, I even followed it. Operationally, that meant that the chapter on recent developments in macro theory was eliminated and yet another chapter on macro policy was added. In addition more policy discussion was added throughout the book.

Third, the reviewers said the book needed more questions, so I added them—10 margin questions in each chapter (with answers at the end of the chapter) and at least three additional thought problems at the end of each chapter. The questions

remain varied—sometimes serving as a review, sometimes serving to push the student beyond the text.

Fourth, they told me that some reorganization was necessary. So I reorganized. Probably the biggest reorganization concerned the international section. The reviewers told me that if I believe, which I do, that international issues are central to studying economics, there is no justification for an international section separate from micro and macro. So I eliminated it, dividing chapters into macro and micro coverage and placed the relevant chapters directly in the macro and micro sections.

# The Usual Revisions: Updates and Improvements

Besides the above substantive changes, there were also the usual revisions. Times and issues change and that change requires modifications; a book quickly becomes out of date. Thus, in the second edition I updated all the discussions and data, and brought the policy discussions up-to-date. For example, I added discussions of health insurance, the macro problems facing the Clinton administration, the problems of the proposed European Currency Union, and the introduction of NAFTA.

The reviewers also told me that, as is inevitably the case, the first edition had pesky little problems. My explanation here wasn't quite clear; my explanation there was too long; I didn't give enough examples here; I got my facts a bit wrong there. It's amazing how many mistakes one can make in 900 pages. This second edition allowed me to clear up all those pesky little problems. (Would you believe, "eliminate some of them?") It's also amazing how one can think one is being perfectly clear, when one is actually being very ambiguous. Luckily, reviewers and friends pointed out a number of these places, and because of them the book was improved immensely. Those changes won't be obvious upon glancing at the book, but they will, I believe, be obvious to the students who will have fewer questions upon reading it.

# A Change Not Made: My Colloquial Writing Style

One change not made in this second edition, even though it put off some professors, is my colloquial writing style. It's pretty clear that my writing style (and my style in general) isn't professorial. I agree; it isn't. But in my view, students would learn a lot more if professors were a lot less professorial. If students see us as people, they will be encouraged to think through what we have to say, and to challenge us when they think we're wrong. That's the purpose of education—to get students to think. True, it would be nice if students had a love of learning and were thirsting for knowledge. Unfortunately, the reality is that 99% of them don't. It's our job as teachers to make learning fun and exciting for students who don't want to learn, and either get them to learn, or to flunk them out. Being less professorial makes us more real to students and makes learning more fun.

I see the course and the book as an entry point to an enormous store of information, not as the ultimate source. I want to motivate students to learn on their own, to read on their own, to think on their own. These desires have to be taught, and they can only be taught in a language that students can relate to. I believe in going in steps with students, not in leaps. The traditional textbookese is too much a leap for most students to make. It's not a step from the stuff they normally read; it's a leap that most of them aren't willing to make—the same type

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of leap it is for most of us teachers of economics to read the *Journal of Economic Theory*. There may be some relevant information in those articles, but most of us teachers aren't going to find out because the language the ideas are presented in is incomprehensible to us. So too with a text; it has to talk to students, otherwise they won't read it. I'm pleased to say that students have uniformly related to my style, even if they think my jokes are sometimes corny.

# 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 innumerable referees of both the first and second editions who went through the various versions of the text, and kept me on track:

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Marion Walsh
Lansing Community
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The formal reviews are only a small portion of the total reviewers. There were many faculty and students who have informally pointed out aspects of the book that they liked, or did not like. There are so many that I can't remember, and don't have room to list, them all, but I hope by listing a few of them I can give you a sense of the importance of these informal reviewers. Some of these individuals (who happen to come to mind at the moment) are:

Roger Adkins, Zahiruddin Alim, John Atkins, Anis Bahreinian, Jim Barbour, Robin Bartlett, Roger Beck, John Bethune, Paula Bracy, Allen Bradley, Jim Bryan, Scott Callan, Kristine Chase, John Conant, John Cornwall, Robert Crofts, Mahmoud Davoudi, Roger Dimick, Rohini Divecha, Jim Esen, Susan Feiner, Ann Fender, Windsor Fields, Richard Fryman, Art Gibb, Derrick Gondwe, Leland Gustafson, John H. Hoag, Janet Harris, Ric Holt, Dave Horlacher, Jim Hubert, Jim Kelsey, Rose Kilburn, Alfred Konuwa, Roger Koppl, Chris Kuehl, Harry Landreth, June Lapidus, Robert Liebman, Peyton Lingle, Lew Marler, Tom Mayer, Susan McGowan, Pat McMahon, Frank Mossadeghi, Joy Newcomb, Michael Paganelli, Tom Porebski, Abdul Qayum, Mary Jean Rivers, James R. Scheib, Sunder Rameswamy, John Ranlett, Nancy Roberts, Sam Rosenberg, Barkley Rosser, Ted Scheinman, Peter Sephton, Scott Sewell, James Smith, Noel Smith, Howard Stein, Keven Stephenson, Terry Stokes, Kit Taylor, Janet Thomas, Roger Traver, Lisa Tuttle, S. V. Char, David Wagenblast, Kristi Weir, Geraldine Welch, Bruce Welz, Peter Wyman. There are many more.

Often their helpful comments were in the form of questions, and in trying to answer them it became clear that the problem was a reflection of my failure of exposition, not in their understanding. I thank all these individuals, (and apologize to the many, many unlisted ones).

I am happy to say that my group of friends throughout the profession is expanding. One of the pleasant aspects of the book is that it led to a large number of invitations to speak throughout the country. At those talks, I met some wonderful economics educators. These talks played a role in the development of an informal group of economics educators who are concerned about the way economics is taught. Together, we've been putting some pressure on the economics establishment to pay more time to teaching and to concern itself more with content teaching issues. The petition we organized (published with all our signatures in the AER) of almost 500 undergraduate professors of economics committed to changing the way economics is taught in graduate school made an impact, as did the positive reception given to the first edition of this text. The graduate schools know economists committed to quality undergraduate teaching-which includes conveying a sense of history and institutions—are out there. Eventually, I think we will begin to see some change in the profession—not large change. mind you—institutions don't allow large, sudden changes, but positive, glacial changes in the right direction. My sincere thanks to all who have helped in this effort.

# Massaging the Manuscript into a Book

Once the manuscript takes its final form there are still an almost infinite number of jobs to be done on it. Figures must be checked, arguments checked, drafts read, reread, and reread once again. In this second edition, I had immense help in these undertakings from Jenifer Gamber, who is a superbly trained economist and a great organizer. She found last minute data and saw to it that the answers to all the questions were reasonable. Others who helped include Zach Gemignani, who worked as my research assistant in the summer of 1993, and Sandro Wulff, who worked as my research assistant in the summer of 1994. They both did great jobs, and I thank them.

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Irwin, who convinced me that Irwin was the right publisher for me. Two others are Gary Nelson, and his assistant, Tia Schultz. Gary is the economics editor at Irwin. He believed in the project early on and argued for it when others were concerned that I was a bit too blunt for the publishing world. He has seen to it that the project has gone forward and has prospered. The book would not have been what it is without him. And without Tia seeing that things get done, we would have not met any deadlines. A big thanks to both of them.

Then there's Jackie Scruggs, my developmental editor for this second edition. To understand Jackie's role, you have to understand a bit about me. I'm a difficult person to work with. I'm an outlandish perfectionist, a stickler about deadlines, and rather blunt in my assessments. I don't like excuses or bureaucracy. I want things done perfectly, yesterday. Given these characteristics of mine, the fact that I can coexist with publishing houses is unexplainable—except for the existence of people like Jackie within the publishing houses. Jackie is superb. She almost always gets things done perfectly, yesterday, and when she doesn't, she offers no excuses—she simply gets them done today. She operates in a bureaucracy without losing sight of her main duty—to get the job done competently and professionally. She's a gem, and I thank her.

I would also like to thank upper-level management at Irwin—specifically Mike Junior, the publisher, and Jeff Sund, the president. I had less contact with them, but I fully recognize their guiding hands. Their belief in the project and their willingness to make it possible for an anti-bureaucratic author to fit in with a formal publishing institution allowed the first edition to proceed and this second edition to improve. I thank them enormously.

The actual production process of a four-color introductory book is complicated. It requires enormous efforts. Luckily, I had Denise Santor-Mitzit, project editor, directing the manuscript through the process. She did a superb job, as did all the players in the production process: Tom Serb, the copy editor; Heidi Baughman, the designer who made the book look good; Ann Cassady, the production manager, who worked with Better Graphics, Inc., the typesetter, and Von Hoffmann Press, the printer; and Kim Meriwether, art manager, who worked closely with ElectraGraphics, Inc., on the art program.

Of course, as they did their superb job, they created more work for me, reading the galley proofs, the page proofs, and doing all the final checking that must be done in an effort to eliminate those pesky errors that occur out of nowhere. Jenifer Gamber and Helen Reiff went over the manuscript with their fine-tooth combs and discerning eyes, and I went over it with my rake and 20-400 vision, and together we caught things overlooked until then. I thank them enormously for doing what I cannot do, and apologize to them for complaining that they are so picky.

After you have what you believe is a good book, the process still isn't done. You still have to get people to look at it. Ron Bloecher, Bevan O'Callaghan, and John Wood developed a strategy that got the first edition considered, and they have continued that superb work in this second edition. David Littlehale also quickly got a sense of what I was trying to do with the book and captured the essence of it when he explained that I was being "aggressively neutral." I thank him. Mark LaCien and Beth Saviski worked on the advertising and did a great job.

Then, there are the sales reps who are the core of a textbook publishing company. As I traveled around the country giving lectures, I met with many of the Irwin sales reps, discussing the book and learning to see it through their eyes. There are a number I remember very well; they sent me books, comments, and talked with me for hours about publishing and Irwin. Since our talks were often honest, blunt, and off the record, I won't mention them, but I will thank them sincerely. Irwin has one great set of sales representatives out there, and I thank them for getting behind the book.



Preface xi

# Creating the Package

These days an introductory economics book is much more than a single book; it is an entire package, and numerous people have worked on the package. Amy Winston was the developmental editor for the ancillaries, and Paul Estenson was the supplements coordinator. I thank them both for their hard work.

The supplements authors were as follows:

Paul Estenson, Supplements Coordinator, Instructor's Manual, Test Banks, Teaching Transparencies, Economics Issues Videos, Ready Notes, Using Technology to Teach Economics

Susan Dadres, Test Banks A & B

Douglas Copeland, Student Workbook

Richard Trieff and Benjamin Shlaes, Study Guide

Jenifer Gamber, Economics Fax Newsletter, Wall Street Journal Applications, Answers to end-of-chapter questions in Instructor's Manual

Andreas Ortman and Dave Colander, Experiments in Teaching and Understanding Economics

Harry Landreth and Dave Colander, Classic Readings Manual

David Reese and Larry Wohl, Essay Test Bank

Kalash Khandke, Sunder Ramaswamy, and Dave Colander, Honors Companion

Craig Roger and Ross Daniel, Student Workbook for use with Irwin PRESS

Craig Roger and Ross Daniel, Instructor's Manual to accompany Irwin PRESS

Brim Software Group, Microview/Macroview Software

There are stories to go with each of these authors—and enormous thanks to be given to them all, but the publisher has

told me this preface must be short, so I will simply say thank you to all the supplements authors for making a high-quality and innovative supplements package to the text.

Finally, there's the group of people who helped me at every stage of the process. My colleagues at Middlebury and the Middlebury administration were supportive throughout the project. As usual, my assistant, friend, and conveyer of great insights, Helen Reiff, was my right hand. I appreciate her limiting her law practice to see that justice is done to my books.

Then, there's my wife, Pat, who put her medical practice on hold to give me more time to work on the first two editions of the book, only going back to work once this second edition was in the final stages. Only now that she has gone back to work do I recognize how absolutely necessary to getting this book out her sacrifice was. I strongly believe that, ultimately, family comes first, and as much as I love economics, if it isn't compatible with my family, then it, too, must go. Pat made it possible for me to put enormous effort into economics while still feeling that our family remained a family. Now that she has gone back to work it's my turn to be the primary care giver, and let me tell you, writing an economics textbook is a cinch compared to this job. (Let me add, however, that the world will, in the next edition-if I have time to work on it-hear about medical residency programs that don't provide the type of training a primary care physician needs, but instead seem to be primarily designed to provide cheap labor for hospitals, restrict entry into the medical profession, and give those doctors who have made it through a moral sense that they deserve the outlandish fees they will be charging.)

My love and admiration for Pat remain as unbounded as ever, even if I hardly ever see her these days—since she is working all the time at the hospital.

As you can see, although my name is on the book, many people besides me deserve the credit. I thank them all.

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