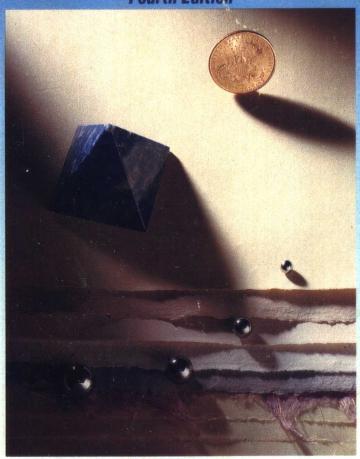
MACROECONOMICS

Fourth Edition



BYRNS . STONE

MACROECONOMICS

Fourth Edition

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TO THE INSTRUCTOR

Our major objective is to ensure that students learn the basic economic principles that provide unique insights into how the world works. Just as one task of any good actor is to keep the audience from yawning, our goal cannot be realized if students find the material so difficult, abstract, or dull that they will not read it—an all-too-common failing.

Good writing and powerful examples can overcome student apathy and a routine failure to link "textbook" economics with highly-publicized, real-world issues. Smooth and logical flow are a product of revision—and more revision. We are pleased that each new edition of *Macroeconomics* seems livelier and more polished than its predecessor. Far more than most principles texts, this book applies theory to a rich variety of everyday experiences, historical events, and recent headlines. These intuitively appealing examples help students internalize and apply economic reasoning.

Special Features of this Text

Our conventional organization should make it unnecessary to radically alter your principles syllabus. Each part of *Macroeconomics* 4/e opens with a broad introduction indicating how sequential chapters are related, and each chapter begins with a list of Key Terms and an overview of the topics it covers. Numerous other pedagogic aids run through the text:

1. Major points are italicized, and

Key terms and **economic laws** are **bold-faced** when introduced, with *definitions that are* set off from the rest of the text.

2. Analytical graphs are rendered simply, to efficiently convey economic concepts, and attractively, to pique students' interest. Standardized notation in graphs and equations aids student comprehension. Descriptive and historical data are illustrated in a modern style that parallels the graphical techniques used when data are presented by the media—whether in newspapers, in such magazines as Fortune or Time, or in TV news broadcasts.

- Boxed Focuses (for example, Will Social Security Absorb our National Debt? and The Costs of Protectionism) and Biographical Sketches are used judiciously to give students a well-rounded introduction to economics.
- 4. Chapters conclude with (a) a comprehensive Chapter Review that covers Key Points, (b) Problems for students to work, and (c) several Questions for Thought and Discussion.
- Frequent legal cases reveal the linkages between Law and Economics.
- Optional Materials on selected analytical concepts (for example, Graphing, the Mathematics of Multipliers) are appended to some chapters for instructors who like more intensive coverage.
- An extensive Glossary and thorough Indexes at the end of the book provide handy references for students.

Key Changes in the Fourth Edition

A mix of minor and major improvements in content, organization, and flow permeates every page of *Macroeconomics* 4/e, but two key changes may affect how you structure your course if you taught out of our previous edition:

- A new chapter covers the causes and effects of mammoth federal deficits.
- 2. International economics receives greater emphasis. Such issues woven throughout the text are: the competitiveness of U.S. business, the consequences of federal deficits for U.S. balances of payments and the exchange rate of the dollar, and the "dumping" of agricultural products in the context of rising protectionist sentiment. There is also expanded discussion of the many types of gains from trade and the costs of protectionism.

Printed Supplements _____

Our *Economics* package provides a broader spectrum of teaching supplements than is available for any other set of texts for principles of economics:

 Great Ideas for Teaching Economics now includes roughly 600 analogies, anecdotes, exercises, and general teaching tips, contributed by instructors from across the country.

- 2. Our Student Guide for Learning Macroeconomics uses a variety of techniques to facilitate student mastery of economic concepts. Each chapter includes an extensive chapter review, matching problems, true-false questions, fill-in reviews, multiple-choice questions, and problems sets, and some have specialized exercises as well. Answers are keyed to the text, and the logic of the economic reasoning used to solve challenging problems is outlined.
- 3. The Instructor's Manual for Teaching Economics contains chapter outlines, lecture suggestions, answers to end-of-chapter problems and questions, and analyses of the legal cases that conclude many chapters. Some supplementary materials can be reproduced as class hand-outs (e.g., selected legal cases and extra biographical sketches).
- 4. The *Test Bank for Economics* has grown into *Bank A* and *Bank B*. Our 7,000 question base allows you to alternate test banks between semesters. Software versions of this set of class-tested *Test Banks* are available for IBM and Macintosh compatible microcomputers.
- 5. The expanded *Hyperinflation Collection* contains brief histories and actual samples of currency and stamps from such hyperinflations as those experienced in Germany in the 1920s, Greece and Hungary in the 1940s, and South America in the 1980s
- 120 four-color overhead *Transparencies* of selected important figures and tables from the text are provided.

Software Supplements for Students

Available shrink-wrapped with *Macroeconomics* 4/e is a Macroeconomics Software Package containing three new or revised programs: *Macrosim, Study-Calc*, and the *Graph Tutor*. Students should find the exercises they contain a gratifying and enjoyable way to study parts of this material.

1. *Macrosim*, a computer-based simulation, allows students to manipulate policy instruments (e.g., government spending, tax rates, and the money supply) in attempts to stabilize economic activity and stimulate growth. The new *Student Edition* (with problem sets) uses building blocks, starting with a very simple Keynesian model, so that it can be used step-by-step throughout the macro course. An Instructor's Edition, *Create*, allows instructors to tailor scenarios to reflect virtually any macroeconomic view of how the world works.

- Study-Calc, a simple spreadsheet and graphics generator, provides students with a "hands-on feel" for the relationships between equations and economics graphs. Numerous macro exercises are included.
- 3. Graph Tutor is a new program that helps students learn to interpret, understand, and manipulate graphs. Students begin with such fundamentals as constructing graphs by identifying points in Cartesian space. They then shift curves or move along them in response to on-screen queries.

Software Supplements for Instructors

- 1. ExamWord is a new program that converts your favorite word processor into a powerful test generator for IBM compatibles. Draw questions from the 7,000 item Test Banks we've prepared (or write your own with any processor that supports ASCII text), build your exam with ExamWord, and then use your own program's familiar routines to print your exams.
- 2. ExamScience extends ExamWord to allow automatic printing of complex equations and sophisticated graphics. Ready-to-print graphs are included on the diskettes for our 7,000 item Test Banks, or you can use ExamScience (or most standard graphics programs) to build files for your own questions. This versatile program supports over 150 different printers.
- 3. TSP—the Student Version. We provide a data diskette containing dozens of macroeconomic time series (and student exercises) with this statistical analysis program. Many economists have found this version of TSP to be a great tool for a wide variety of elementary research.
- 4. The *Diploma* class management system includes four computer programs for IBM, Apple IIc and IIe, and compatible microcomputers:
- (a) Exam provides question creation and editing features for use in developing, maintaining, and altering test banks. Unlimited questions can be accommodated in four formats: multiple choice, true/false, matching, and short answer/essay. Our Test Banks are provided on diskettes for this program.
- (b) Gradebook automatically tracks grade averages for both students and tests and can display letter grades, percentage averages, or points earned.
- (c) Proctor allows students to take tests at a computer. Students can browse, skip hard questions, alter answers, and review responses, as if the test were being taken on paper. Grading is automatic.

Our *Guides* software provides drills that use *Proctor* to cover 15 core areas in ways that economics students will remember, and can easily be supplemented.

- (d) Calendar is a free-form scheduling tool that allows instructors to enter several events or messages for any particular day. A transfer feature automatically recycles recurring events without retyping. Messages can be easily entered, edited, saved, displayed, or printed.
- 5. Microtest II is a computer test generator that makes our Test Bank run on the Macintosh.

Any principles text is always in process. Suggestions that aid us in making the next edition of *Macroeconomics* or its supplements clearer, more topical, or more complete will be deeply appreciated and gratefully acknowledged. Please send your comments to us, c/o Scott, Foresman and Company, 1900 East Lake Avenue, Glenview, Illinois 60025.

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Once more, we dedicate this book to Sheila, Trish, Mathew, Rachel, Jennifer, and Melissa. We hope that seeing their names in print remains a thrill.

TO THE STUDENT

A 1987 poll of almost 1,600 Americans generated the following list of the ten biggest problems facing the United States: 1 AIDS, 2. illicit drugs, *3. costs of health care, *4. size of the federal deficit, *5. taking care of the homeless, *6. quality of public education, *7. U.S. trade deficit, 8. agreements with the USSR, 9. U.S. involvement in Central America, *10. likelihood of a recession.

The six problems marked with asterisks involve economics directly. The other four—controlling AIDS and drug addiction, and peacefully resolving the cold war with the Soviet Union and civil wars in Central America—are less obviously economic problems, but each has major economic consequences. This list suggests that economics looms large in most major national problems. But how does economics directly affect your life?

The basic economic problem confronting you, if you are typical, is that you would like far more than you can afford. Tuition and books probably absorb much of the income you would like to devote to clothes, cars, and entertainment. You would probably also like more time to study, a more gratifying social life, or more sleep. Your limited budget and time require decisions about how you will spend your hours and money. In a similar way, all societies must choose among alternatives. How individuals and societies choose, and the effects of their choices, are the focal points of economics.

Economics can be as fascinating as anything you will ever study and, if you are diligent, it will seem natural and logical. Understanding economics enables you to systematically address issues ranging from national policies to your professional and personal life. Insights gained from an economic perspective can provide you with advantages that most people lack.

¹ U.S. News & World Report, 28 December 1987, p. 28.

How to Study Economics

Superficial cramming is very unlikely to succeed in an economics course. Keeping up is crucial. Research by educational psychologists indicates that learning is most effective when you are exposed to information and concepts in several ways over a period of time. You will learn more economics and retain it longer if you read, see, hear, communicate, and then apply economic concepts and information. This material is much more than a few facts and glib generalizations; understanding economics requires reflection. Here is one systematic study strategy that many students have found successful in economics, and have adapted for other classes.

Visual Information

Don't let the extensive graphs in economics frighten you. There is a brief review of graphical analysis at the end of chapter 1; our *Student Guide for Learning Economics* also opens with a set of helpful exercises. Avoid the agony of trying to memorize each graph by taking the time to learn how graphs work. Proceed to chapter 2 only after you quell your anxiety a bit. (Be sure that you also understand simple algebra. The algebra used in this book is elementary, and should prove no problem if you have learned the material from a basic course.) As you become familiar with graphs, you may be surprised to find yourself mentally graphing many noneconomic relationships, and even more amazed to find this process enjoyable.

Reading

Schedule ample time to read your assignments, and try to use the same quiet and cool (but not cold) room every day. Avoid drowsiness by sitting in a hard chair in front of a desk or table. Think about the material as you read. Many students spend hours highlighting important points for later study, for which they somehow never find time. Too frequently, busy-

work substitutes for thinking about economics. Try to skim a chapter; then go back and really focus on five or six pages. Don't touch a pen or pencil except to make margin notes cross-referencing related materials you already know.

Writing

After a healthy dose of serious reading, close your text and outline the important points with a half-page of notes. If you cannot briefly summarize what you just read, put your pen down and re-read the material. You have not yet digested the central ideas. Don't be surprised if some concepts require several readings. Be alert for graphs and tables that recapitulate important areas. When you finish each chapter, read its Chapter Review, work through all Problems, and outline good, but brief, answers to all Questions for Thought and Discussion.

Listening

Most lectures blend your instructor's own insights and examples with materials from the text, but few students conscientiously work through assignments before lectures. You will have a major advantage over most of your classmates if you do, and will be able to take notes selectively. Focus on topics that your instructor stresses but which are not covered in depth in the text. Notes from lectures should supplement, not duplicate, your text.

Teaching

Your instructors know that they learn their subject in greater depth every time they teach it. Teaching exposes you to previously unfamiliar aspects of a topic because you must conceptualize and verbalize ideas so that other people can understand them. Take turns with a classmate in reading the Key Points (in the Chapter Review) to each other. After one person reads a Key Point aloud, the other should explain it in his or her own words. Study groups work well in this way, but you may learn economics even more thoroughly if you simply explain economic concepts to a friend who has never studied it.

Applications

Working through the material from our *Student* Guide for Learning Economics that parallels each chapter of the text will make it easier to comprehend

the economic events regularly featured in the news. When this happens, you will be among the minority who truly understand economic and financial news. Use economic reasoning to interpret your day-to-day behavior, and that of your friends and relatives. This will provide unique insights into how people function and how the world works.

Examinations

Following the preceding suggestions should prepare you for minor tests and quizzes. To prepare for major exams and finals:

- Read the Chapter Reviews for all chapters that will be covered on the examination. Keep a record of each Key Point that you could not explain to an intelligent friend who had never taken economics.
- Return to each Key Point that you have not grasped adequately. Read the text material that covers it and rework the parallel parts of the accompanying chapter from your Student Guide.
- Discuss any Key Point that is not clear to you with a friend.
- 4. Skim the Glossary at the end of the text for a lastminute refresher before your final exam. See if this technique works for you.

We know that this is a tall order, but if you conscientiously follow these study tips, we guarantee you an enjoyable and enlightening course.

Careers in Economics ____

Many students find studying economics a pleasant surprise, but wonder if this interesting field is practical. Professors are often asked, "Could I get a good job with a bachelor's degree in economics?" We won't promise anything, but new economics graduates have job opportunities in such areas as public administration, operations analysis, management trainees and internships, sales, real estate appraisal, production management, insurance, or investment and financial analysis. What you might do as an economist depends on your specific areas of study, your minor, and how far you continue your training.

Economists are employed in most large business firms, government agencies, and nonprofit organizations. Many economists teach because effective personal, business, and political decision making increasingly requires economic literacy. Quite a few also find that there are substantial and remunerative demands for their services as consultants or researchers.

Business

Executives are increasingly aware that workable business strategies and policies require applied economic reasoning. Roughly one third of economists are employed by private firms and trade associations. Most medium-to-large firms in manufacturing, transportation, energy, investment, communications, banking, insurance, retailing, utilities, finance, and mining employ one or more economists. Many have staffs of economists. In 1987, the median income of business economists was above \$51,000, with entry salaries exceeding \$23,000. Most business economists have advanced degrees, but there are opportunities for bright, hard-working people with bachelor's degrees. Business economists with only bachelor's degrees averaged more than \$38,000 in 1987.

Government and Nonprofit Organizations

One economist in five works for a nonprofit corporation or for government. For example, eight prominent economists served in six different cabinet-level posts in the administrations of Presidents Carter and Reagan. Local, state, and federal agencies offer job opportunities for people with training in economics ranging from a bachelor's degree through post-doctoral training.

Teaching

Roughly half of all economists with advanced degrees are teacher/researchers employed by colleges and universities. At the university level, there are ample opportunities and rewards for economic research and consulting. Academic economists averaged annual incomes of roughly \$40,000 in 1988. Many states have recently made economics a requirement for a high school diploma. People motivated to teach economics, but not to endure extended graduate training, are finding a growing demand for their services as teachers in secondary schools.

We hope that you find this text helpful and enjoyable as you study economics. Many valuable suggestions for improvement were provided by students who used earlier versions of this book. If you have any comments, we would like to hear about them. Write us in care of Scott, Foresman and Company, 1900 East Lake Avenue, Glenview, Illinois 60025.

Ralph T. Byrns Gerald W. Stone, Jr.

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