



MACROECONOMICS

seventh edition

DOLAN

and

LINDSEY

MACROECONOMICS

s e v e n t h e d i t i o n

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THE DRYDEN PRESS
HARCOURT BRACE COLLEGE PUBLISHERS

*Fort Worth Philadelphia San Diego New York Orlando Austin San Antonio
Toronto Montreal London Sydney Tokyo*

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<i>Compositor</i>	Black Dot Graphics
<i>Text Type</i>	10.5/12 Adobe Garamond
<i>Cover Image</i>	Haruhi Fujii/Photonica

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Address for Editorial Correspondence

The Dryden Press, 301 Commerce Street, Suite 3700, Fort Worth, TX 76102

Address for Orders

The Dryden Press, 6277 Sea Harbor Drive, Orlando, FL 32887
1-800-782-4479, or 1-800-433-0001 (in Florida)

ISBN	Version	Library of Congress Catalog Card Number
0-03-097570-0	Macroeconomics	93-71249

Printed in the United States of America

3 4 5 6 7 8 9 0 1 2 0 4 8 9 8 7 6 5 4 3 2 1

The Dryden Press
Harcourt Brace College Publishers

CIVILIAN UNEMPLOYMENT RATE, 1948-92 [PERCENT;¹ MONTHLY DATA SEASONALLY ADJUSTED]

Year or month	All civilian workers	Males			Females			Both sexes 16-19 years	White	Black and other	Experienced wage and salary workers	Married men, spouse present ²	Women who maintain families
		Total	16-19 years	20 years and over	Total	16-19 years	20 years and over						
1948	3.8	3.6	9.8	3.2	4.1	8.3	3.6	9.2	3.5	5.9	4.3	.....	.....
1949	5.9	5.9	14.3	5.4	6.0	12.3	5.3	13.4	5.6	8.9	6.8	3.5	.....
1950	5.3	5.1	12.7	4.7	5.7	11.4	5.1	12.2	4.9	9.0	6.0	4.6	.....
1951	3.3	2.8	8.1	2.5	4.4	8.3	4.0	8.2	3.1	5.3	3.7	1.5	.....
1952	3.0	2.8	8.9	2.4	3.6	8.0	3.2	8.5	2.8	5.4	3.4	1.4	.....
1953	2.9	2.8	7.9	2.5	3.3	7.2	2.9	7.6	2.7	4.5	3.2	1.7	.....
1954	5.5	5.3	13.5	4.9	6.0	11.4	5.5	12.6	5.0	9.9	6.2	4.0	.....
1955	4.4	4.2	11.6	3.8	4.9	10.2	4.4	11.0	3.9	8.7	4.8	2.6	.....
1956	4.1	3.8	11.1	3.4	4.8	11.2	4.2	11.1	3.6	8.3	4.4	2.3	.....
1957	4.3	4.1	12.4	3.6	4.7	10.6	4.1	11.6	3.8	7.9	4.6	2.8	.....
1958	6.8	6.8	17.1	6.2	6.8	14.3	6.1	15.9	6.1	12.6	7.3	5.1	.....
1959	5.5	5.2	15.3	4.7	5.9	13.5	5.2	14.6	4.8	10.7	5.7	3.6	.....
1960	5.5	5.4	15.3	4.7	5.9	13.9	5.1	14.7	5.0	10.2	5.7	3.7	.....
1961	6.7	6.4	17.1	5.7	7.2	16.3	6.3	16.8	6.0	12.4	6.8	4.6	.....
1962	5.5	5.2	14.7	4.6	6.2	14.6	5.4	14.7	4.9	10.9	5.6	3.6	.....
1963	5.7	5.2	17.2	4.5	6.5	17.2	5.4	17.2	5.0	10.8	5.6	3.4	.....
1964	5.2	4.6	15.8	3.9	6.2	16.6	5.2	16.2	4.6	9.6	5.0	2.8	.....
1965	4.5	4.0	14.1	3.2	5.5	15.7	4.5	14.8	4.1	8.1	4.3	2.4	.....
1966	3.8	3.2	11.7	2.5	4.8	14.1	3.8	12.8	3.4	7.3	3.5	1.9	.....
1967	3.8	3.1	12.3	2.3	5.2	13.5	4.2	12.9	3.4	7.4	3.6	1.8	4.9
1968	3.6	2.9	11.6	2.2	4.8	14.0	3.8	12.7	3.2	6.7	3.4	1.6	4.4
1969	3.5	2.8	11.4	2.1	4.7	13.3	3.7	12.2	3.1	6.4	3.3	1.5	4.4
1970	4.9	4.4	15.0	3.5	5.9	15.6	4.8	15.3	4.5	8.2	4.8	2.6	5.4
1971	5.9	5.3	16.6	4.4	6.9	17.2	5.7	16.9	5.4	9.9	5.7	3.2	7.3
1972	5.6	5.0	15.9	4.0	6.6	16.7	5.4	16.2	5.1	10.0	5.3	2.8	7.2
1973	4.9	4.2	13.9	3.3	6.0	15.3	4.9	14.5	4.3	9.0	4.5	2.3	7.1
1974	5.6	4.9	15.6	3.8	6.7	16.6	5.5	16.0	5.0	9.9	5.3	2.7	7.0
1975	8.5	7.9	20.1	6.8	9.3	19.7	8.0	19.9	7.8	13.8	8.2	5.1	10.0
1976	7.7	7.1	19.2	5.9	8.6	18.7	7.4	19.0	7.0	13.1	7.3	4.2	10.1
1977	7.1	6.3	17.3	5.2	8.2	18.3	7.0	17.8	6.2	13.1	6.6	3.6	9.4
1978	6.1	5.3	15.8	4.3	7.2	17.1	6.0	16.4	5.2	11.9	5.6	2.8	8.5
1979	5.8	5.1	15.9	4.2	6.8	16.4	5.7	16.1	5.1	11.3	5.5	2.8	8.3
1980	7.1	6.9	18.3	5.9	7.4	17.2	6.4	17.8	6.3	13.1	6.9	4.2	9.2
1981	7.6	7.4	20.1	6.3	7.9	19.0	6.8	19.6	6.7	14.2	7.3	4.3	10.4
1982	9.7	9.9	24.4	8.8	9.4	21.9	8.3	23.2	8.6	17.3	9.3	6.5	11.7
1983	9.6	9.9	23.3	8.9	9.2	21.3	8.1	22.4	8.4	17.8	9.2	6.5	12.2
1984	7.5	7.4	19.6	6.6	7.6	18.0	6.8	18.9	6.5	14.4	7.1	4.6	10.3
1985	7.2	7.0	19.5	6.2	7.4	17.6	6.6	18.6	6.2	13.7	6.8	4.3	10.4
1986	7.0	6.9	19.0	6.1	7.1	17.6	6.2	18.3	6.0	13.1	6.6	4.4	9.8
1987	6.2	6.2	17.8	5.4	6.2	15.9	5.4	16.9	5.3	11.6	5.8	3.9	9.2
1988	5.5	5.5	16.0	4.8	5.6	14.4	4.9	15.3	4.7	10.4	5.2	3.3	8.1
1989	5.3	5.2	15.9	4.5	5.4	14.0	4.7	15.0	4.5	10.0	5.0	3.0	8.1
1990	5.5	5.6	16.3	4.9	5.4	14.7	4.8	15.5	4.7	10.1	5.3	3.4	8.2
1991	6.7	7.0	19.8	6.3	6.3	17.4	5.7	18.6	6.0	11.1	6.5	4.4	9.1
1992	7.4	7.8	21.5	7.0	6.9	18.5	6.3	20.0	6.5	12.7	7.1	5.0	9.9

¹Unemployed as percent of civilian labor force in group specified.

²Data for 1949 and 1951-54 are for April; 1950, for March.

Note.—Data relate to persons 16 years of age and over.

Source: Department of Labor, Bureau of Labor Statistics.

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PREFACE



CHANGE IS THE
ONLY CONSTANT

In the twenty years since we began collaboration on this textbook, the only constant in economics has been change.

In part the changes have been in the discipline of economics. In macroeconomics, new-Classical and new-Keynesian economists have taught us much about the dynamics of inflation and unemployment, the role of expectations in shaping economic behavior, and the interaction of the domestic and world economies. In microeconomics, the contributions of public choice theory have lent a new perspective to many policy issues; neo-institutionalists have provided new insights on transaction costs, property rights, and the economic role of information; and the work of the modern Austrian school has brought a new emphasis to the role of entrepreneurship.

But even more importantly, the economic world itself has changed. Of all these changes, none has been more dramatic than the fall of communism in Eastern Europe and the Soviet Union, and the embarkation of more than twenty newly free or newly independent countries on the difficult transition to a market economy.

Both of us have found ourselves playing bit parts in this economic drama.

Since 1990, I (Edwin G. Dolan) have spent more than half of my time teaching economics and business to Russian students in Moscow. For my students there, economics is a “required course” not in terms of some college catalog, but in terms of survival. To study economics and business in Russia today is literally to walk through a door from one world into another.

Meanwhile, I (David E. Lindsey) have travelled as part of a joint IMF-Federal Reserve team of advisers to the Central Bank of Kirghizstan. This remote and mountainous country has become a leader among the newly independent Central Asian states in adopting market institutions. I have participated directly in such fundamental steps as the introduction of a new currency and the establishment of security markets.

These experiences have affected us and this text profoundly. This is a book about first principles, and nothing so sharpens one’s focus on first principles as teaching them and debating them in those places where a new economic system is being built from scratch. Thus, in revising this text for the sixth time, we have achieved a fresher perspective on the subject matter than at any time since the project was first undertaken. This new edition includes the following:

1. *A return to basics.* The most visible change in the textbook is a return to basics. Users will note immediately that the seventh edition of *Economics* is significantly shorter than the sixth edition; in fact, it is only a little longer than the very first edition published in 1977 under the title of *Basic Economics*.

FEATURES OF
THE SEVENTH
EDITION

The guiding principle in selecting topics for this edition has been the *need to know*. Essential principles are set forth with the same clarity and detail as ever. However, many topics added along the way—topics that drew headlines a decade ago but proved to be of only passing interest—have been cut.

2. *Integrated international economics.* As the world economy itself comes closer together, international economics must be more closely integrated into the principles course. Accordingly, topics in international economic theory and policy, ranging from balance of payments accounts to the foreign exchange operations of the Fed, are introduced in the chapters where they occur naturally, rather than presented separately in a single chapter. The special international sections in many chapters are identified in the table of contents by a world map logo.
3. *One-model macro option.* As one part of the focus on basics, the macroeconomic chapters offer a one-model option for teaching the theory of income determination. Fiscal and monetary policy, as well as the theory of inflation and unemployment, can all be taught using the aggregate supply and demand model alone. Chapter 8, which covers the Keynesian income-expenditure model, is self-contained and can be omitted without loss of continuity.
4. *State of the art pedagogy.* The experience of teaching economics to a new audience has led us to focus again on how topics are presented, as well as on the selection of topics. The result, as in all previous editions, is a textbook that is a leader in terms of pedagogy. An abundance of case studies introduce and illustrate the subject matter of every chapter. The most detailed appendix on graphs in any textbook helps students cope with what for some is a stumbling block to the study of economics. Problems and topics for discussion are keyed directly to learning objectives.

For instructors who want still more, additional questions, cases, and topics are available in the study guide and instructor's manual that accompany this text. A new feature of the instructor's manual, entitled "In Depth," presents extensions of basic theory and supplementary topics that were covered in the main text of the longer sixth edition. Thus, users of previous editions who want to cover such topics as isoquant analysis or the J-curve effect may continue to do so.

THE PACKAGE

TEST BANK A BY ED HUME, TEXAS TECH UNIVERSITY

TEST BANK B BY EDWIN G. DOLAN

This edition has two test banks to increase the number and variety of questions available. Test Bank A is based on the previous test bank and has been exhaustively edited and updated; this test bank links more than 2,000 questions to subject headings. Test Bank B will link some 3,000 questions to specific page references in the text. Both test banks will be available for IBM and Macintosh formats on EXAMASTER+. EXAMASTER+ allows you to add and edit your own questions, create and edit graphics, print scrambled versions of tests, convert multiple-choice questions to open-ended questions, plus much more.

INSTRUCTOR'S MANUAL BY EDWIN G. DOLAN AND DAVID E. LINDSEY

The Instructor's Manual has been expanded to include material which previously appeared in the sixth edition of the text in a section called "In Depth." All of this material has been appropriately updated, can be easily included in lectures, and will include the appropriate transparency masters. The manual also includes all of its traditional elements:

- + What's Different Here and Why
- + Instructional Objectives
- + Lecture Notes and Suggestions
- + Examination Problems and Essays
- + Answers to Selected Problems and Topics for Discussion

STUDY GUIDE BY EDWIN G. DOLAN AND DAVID E. LINDSEY

The Study Guide has hands-on applications and self-testing programs. It is available in three versions for *Economics*, *Microeconomics*, and *Macroeconomics*. Students can gain an advantage by reinforcing their reading and lecture notes with the following study guide features:

- + *Where You're Going*. The objectives and terms for each chapter are recapped to tie concepts together.
- + *Walking Tour*. The "Walking Tour" section provides a narrative summary of the chapter and incorporates questions on key points. Answers are given in the margin.
- + *Hands On*. Geographical and numerical exercises clarify concepts and better prepare students for tests and quizzes.
- + *Economics in the News*. A news item illustrates how concepts covered in the chapter can appear in the real world. Questions and answers reinforce the concepts.
- + *Questions for Review*. These questions and answers follow the key chapter concepts, preparing students for the self-test.
- + *Self-Test*. Extra test preparation increases a student's understanding and ability to succeed.
- + *Don't Make This Common Mistake*. Traps and pitfalls are identified so that students can learn from others' mistakes.
- + *Careers in Economics*. Formally an appendix in the text, this material provides students with an understanding of where the study of economics could lead them.

TUTORIAL AND GRAPHING SOFTWARE

BY TODD PORTER AND TERESA RILEY, YOUNGSTOWN STATE UNIVERSITY

This award winning student software has been significantly enhanced to contain an extensive chapter-by-chapter tutorial, a hands-on graphing section where students are

actually required to draw curves (with keystrokes or a mouse), and a practice exam for each section. Available for DOS based computers.

GRAPHIPAC

A highly useful note-taking tool for the student, GraphPac includes all of the graphs in the book, with room for notes.

MACINTOSH TUTORIAL SOFTWARE

Student study software for the Macintosh environment. Students will be able to follow the outline of the core concepts, improving study skills and retention.

PRESENTATION SOFTWARE

- + Menu driven, DOS-based presentation software.
- + Illustrates more than 150 figures from the book.
- + Topics are easily accessed (by chapter and figure number) at any time.
- + Allows user to add lecture notes, video, and laser disk material.

LASER DISKS

- + A brief, five to seven minute video from CBS begins each learning section, with related animated graphics following. Once students understand the concepts, they are challenged with critical thinking questions.
- + Economic principles (supply and demand, factors of production, and so on) are presented graphically.

ECONOMICS IN FOCUS VIDEO

This quarterly video series facilitates multi-level learning and critical thinking through its up-to-date coverage of current events. Consisting of recent segments from *The MacNeill/Lehrer News Hour*, it focuses on economic issues important to students, and their understanding of the economy.

Economics in Focus looks at three major themes:

- + ***International Economics Scene*** covers free trade, foreign policy, and other issues.
- + ***Economic Challenges and Problems*** explores topics such as declining incomes, the budget deficit, and inflation.
- + ***The Political Economy*** looks at the role of the government, free enterprise, and economic stabilization.

Each issue of *Economics in Focus* closes with a special feature story or one-to-one interview with a noted economist.

MEDIA INSTRUCTOR'S MANUAL

A printed manual explains how the laser disc coordinates with the text. It contains video segments summaries, graphic segment summaries, basic concepts summaries, suggested questions for class discussion, and critical thinking questions for each chapter.

TRANSPARENCY ACETATES

The full four-color transparency program for this edition will include all figures from the text.

We wish to thank the following people for their help in revising this edition: Nestor Arguea, University of West Florida; Charles Bennett, Gannon University; Donald Dutkowsky, Syracuse University; John A. Flanders, Central Methodist College; Susan Linz, Michigan State University; Richard Milam, Appalachian State University; William E. Merkle, Bob Jones University; Tim Nash, Northwood Institute; Tim Perri, Appalachian State University; Phillip Smith, DeKalb College—Central; Robert Sorensen, University of Missouri—St. Louis; Roy Van Til, University of Maine—Farmington; Alice Tseng, University of North Carolina—Charlotte; Antonio Ventocilla, Ferris State University; John Wade, Western Carolina University. In addition, special words of thanks go to two individuals. Viktor Lukashevich of St. Petersburg State University in Russia made many useful comments in the course of translating the sixth edition of this text into Russian. Carolyn Smith, who worked as a freelance text editor on this edition, as on several previous editions, contributed an essential element of polish to the final product. Finally, thanks are extended to the staff at The Dryden Press for their professionalism and dedication.

This edition, like previous editions, represents our collaborative work. The views expressed in this book are ours. Nothing in this book should be construed as necessarily reflecting the views of the Board of Governors of the Federal Reserve System or other members of its staff.

Edwin G. Dolan
Great Falls, Virginia

David E. Lindsey
Arlington, Virginia

October 1993

SOME WORDS OF THANKS

ABOUT THE AUTHORS



EDWIN G. DOLAN grew up in the small town of McMinnville, Oregon. He attended Earlham College and then Indiana University, earning a B.A. degree from Indiana. After staying at Indiana to earn an M.A. in economics, he completed his Ph.D. at Yale University. Dolan has taught economics at the University of Connecticut, Dartmouth College, the University of Chicago, George Mason University, and, currently, at Gettysburg College. He has also served as a specialist in transportation regulation, both in the antitrust division of the U.S. Department of Justice and at the Interstate Commerce Commission. His chief research interest is the Russian economic system. A fluent speaker of Russian, Dolan has taught at Moscow State University, the Moscow Financial Institute, and the Russian-American University. He is currently president of the American Institute of Business and Economics, which operates an American business school in Moscow.

DAVID E. LINDSEY comes from the university town of West Lafayette, Indiana. He received his B.A. from Earlham College, where he and Dolan were roommates. He then earned a Ph.D. from the University of Chicago under the direction of Milton Friedman. Lindsey taught economics for several years at Ohio State University and Macalester College. Since 1974 he has been on the staff of the Board of Governors of the Federal Reserve System, where he now serves as Deputy Director of the Division of Research and Statistics and Associate Economist for the Federal Open Market Committee. Among other recent assignments for the Fed, Lindsey has traveled to Kirghizstan as an advisor on monetary reform.

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